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Federal Communications Commission
Washington, D.C. 20002

July 23, 2020

Re: FOIA Control No. 2020-000499

This letter responds to the Application for Review (AFR) filed in connection with the initial Freedom of Information Act (FOIA) response provided on June 17, 2020.[1] In your FOIA request, filed May 23, 2020, and assigned FOIA Control No. 2020-000499, you sought a "copy of the Questions for the Record (QFR) and agency QFR responses to Congress responding to QFRs during calendar years 2017, 2018, 2019 and 2020 to date, for the FCC."[2]

In response to the issues raised in your AFR, the Federal Communications Commission's (Commission or FCC) Office of Legislative Affairs and the offices of individual Commissioners searched for responsive documents, locating approximately 822 pages of documents responsive to your request. We are producing these documents in full and without redaction. The responsive documents are included in the attached PDF file. We hope the Commission's supplemental search for, and production of, the attached documents is sufficient to informally resolve the issues that you raised in your AFR.[3]

We are required by both the FOIA and the Commission's own rules to charge requesters certain fees associated with the costs of searching for, reviewing, and duplicating the sought after information.[4] To calculate the appropriate fee, requesters are classified as: (1) commercial use requesters; (2) educational requesters, non-commercial scientific organizations, or representatives of the news media; or (3) all other requesters.[5]

Pursuant to section 0.466(a)(8) of the Commission's rules, you have been classified for fee purposes under category (3) as an "all other requester."[6] As an "all other requester," the Commission assesses charges to recover the full, reasonable direct cost of searching for

[1] *See* letter from Paul A. Jackson, Dir. Office of Legis. Affairs, Fed. Commc'ns Comm'n June 17, 2020.
[2] FCC FOIA Control No. 2020-000499 (filed May 23, 2020; perfected May 28, 2020).
[3] *See* 47 CFR § 0.461 Note to Paragraphs (i) and (j) (informal resolution of issues).
[4] *See* 5 U.S.C. § 552(a)(4)(A); 47 CFR § 0.470.
[5] 47 CFR § 0.470.
[6] 47 CFR § 0.466(a)(8).

and reproducing records that are responsive to the request; however, you are entitled to be furnished with the first 100 pages of reproduction and the first two hours of search time without charge under section 0.470(a)(3)(i) of the Commission's rules.[7] The production in response to your request required less than two hours of search time, was provided in electronic form, and did not involve more than 100 pages of duplication. Therefore, you will not be charged any fees.

As noted above, our goal in issuing this supplemental response is to resolve informally the issues raised in your AFR. However, if you consider this a denial of your FOIA request, you may seek review by filing an application for review with the Office of General Counsel. An application for review must be *received* by the Commission within 90 calendar days of the date of this letter.[8] You may file an application for review by mailing the application to the Federal Communications Commission, Office of General Counsel, 445 12th St. S.W., Washington, D.C. 20554, or you may file your application for review electronically by emailing it to FOIA-Appeal@fcc.gov. Please caption the envelope (or subject line, if via email) and the application itself a "Review of Freedom of Information Action."

If you would like to discuss this response before filing an application for review to attempt to resolve you dispute without going through the appeal process, you may contact the Commission's FOIA Public Liaison for assistance at:

FOIA Public Liaison
Federal Communications Commission
Office of the Managing Director
Performance Evaluation and Records Management
445 12th St S.W.
Washington, D.C., 20554
FOIA-Public-Liaison@fcc.gov

If you are unable to resolve your dispute through the Commission's FOIA Public Liaison, the Office of Government Information Services (OGIS), the Federal FOIA Ombudsman's office, offers mediation services to help resolve disputes between FOIA requesters and Federal agencies. The contact information for OGIS is:

Office of Government Information Services
National Archives and Records Administration
8601 Adelphi Road – OGIS
College Park, MD 20740-6001
202-741-5770
877-684-6448
ogis@nara.gov
ogis.archives.gov

[7] 47 CFR § 0.470(a)(3)(i).
[8] 47 C.F.R. § 0.461(j); 47 C.F.R. § 1.7 (documents are considered filed with the Commission upon their receipt at the location designated by the Commission).

If you have any questions regarding this response, please contact Brendan McTaggart in the Office of General Counsel at brendan.mctaggart@fcc.gov.

Sincerely,

Elizabeth Lyle
Assistant General Counsel

Enclosure(s)

cc: FCC FOIA Office

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C. 20554

Office of the Director

April 10, 2017

The Honorable John Thune
Chairman
Committee on Commerce, Science, and Transportation
United States Senate
254 Russell Senate Office Building
Washington, D.C. 20510

Dear Chairman Thune:

Enclosed please find responses to the Questions for the Record submitted for Chairman Ajit Pai regarding his appearance before the Committee on March 8, 2017, at the hearing entitled, "Oversight of the Federal Communications Commission".

If you have further questions, please feel free to contact me at (202) 418-2242.

Sincerely,

Timothy Strachan,
Acting Director

IMPORTANT -- PLEASE READ
DO NOT DETACH

United States Senate
Committee on Commerce, Science, and Transportation
Washington, D.C. 20510-6125

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MEMORANDUM

Date: March 24, 2017

To: Chairman Ajit Pai

Date of Hearing: March 8, 2017

Hearing: FCC Oversight

Thank you for your recent testimony before the Senate Committee on Commerce, Science, and Transportation. The information you provided is greatly appreciated.

Attached are **post-hearing questions** pertaining to the hearing mentioned above. As a courtesy, please submit a single document consolidating the posed questions followed by your answers for insertion in the printed hearing record. They should be mailed electronically to the Committee via the Internet to docs@commerce.senate.gov and Matthew_Plaster@commerce.senate.gov.

Should the Committee not receive your response within this time frame or if the Committee staffer assigned to the hearing is not notified of any delay, the Committee reserves the right to print the posed questions in the formal hearing record noting your response was not received at the time the record was published.

Committee staffer assigned to the hearing: Matthew Plaster
Phone: (202) 224-8712
Date material should be returned: April 7, 2017

Thank you for your assistance and, again, thank you for your testimony.

JOHN THUNE

Chairman

Written Question for the Record Submitted by Hon. John Thune to Hon. Ajit Pai

***Question*. Chairman Pai, what steps will you take to ensure the Commission has the benefit of robust economic analysis in its rulemakings, which has been sorely lacking in recent years, and is not constrained by legacy "silos" in approaching increasingly convergent communications technologies? What reforms to the FCC's organization and structure will be necessary, if any, to reflect the changing nature of telecommunications?**

Answer.—Historically, the FCC had been a model for the use of economic analysis in federal policymaking. For example, FCC economists have crafted white papers that have been significant drivers of incredibly important policy innovations, such as the use of auctions to assign licensed spectrum and the use of price cap regulation, rather than rate-of-return regulation. Unfortunately, robust economic analysis has been sorely lacking in the Commission's decision-making in recent years. For instance, in compliance with the Regulatory Right to Know Act, OMB submits an annual report to Congress detailing the benefits and costs of federal rules. According to OMB's 2016 assessment, the FCC issued 11 major rules from 2006 to 2015. By their count, *not one* was accompanied by an estimate of benefits or costs. Additionally, FCC experts have published nearly 90 white papers since 1980, but zero since 2012. Finally, the functions of economic and data analysis are performed by terrific FCC staff scattered throughout the agency, unlike the legal function (vested in the Office of General Counsel) and engineering (housed in the Office of Engineering and Technology).

This decline in the use of economic analysis motivated me to announce recently the creation of a working group to establish an Office of Economics and Data, or OED, at the FCC. This Office will combine economists and other data professionals from around the Commission. I envision it providing economic analysis for rulemakings, transactions, and auctions; managing the Commission's data resources; and conducting longer-term research on ways to improve the Commission's policies. The working group will develop a plan of action by this summer. The Commission will then carefully consider that plan. My goal is to have the new office up and running by the end of the year. My hope is that this Office will enable the more systematic use of core regulatory principles such as cost-benefit analysis and accuracy of data that underlies FCC decisions.

Written Question for the Record Submitted by Hon. Roy Blunt to Hon. Ajit Pai

***Question*. I applaud your work on the recent Order regarding the weighting of application tiers for the CAF II Auction. Rural Missourians have been watching this proceeding closely, and are pleased with your leadership on behalf of rural areas.**

Does the Commission have a timeline for concluding the auction?

Answer.—I appreciated working closely with your office earlier this year as we moved forward on the Connect America Fund Phase II auction. Just last week, I announced the formation of the Rural Broadband Auctions Task Force to oversee implementation of this auction, among others. The Task Force is diligently working through the pre-auction process, with the expectation of conducting the auction in early 2018.

Written Questions for the Record Submitted by Hon. Dean Heller to Hon. Ajit Pai

Question 1. **I have constituents in rural Nevada who rely on over the air tv to get local news and other programming. And the only reason they have that access is because of translators that can get the signal out to them.**

But my concern is that after the spectrum auction is over and broadcast stations have been repacked, rural Nevadans access to over the air tv will be drastically cut.

What impact will repacking have on translators and rural Nevadans access to over-the-air tv?

Answer.—Translators provide important services upon which many in rural communities rely. Although the Spectrum Act does not protect translators in the repacking process, I am committed to doing what we can to ensure that as many translators as possible will stay on the air (and flagged this issue when the FCC adopted its Notice of Proposed Rulemaking for the incentive auction in September 2012). For example, the FCC will open a special filing window for operating TV translator stations that are displaced by the repacking and reallocation of the television bands. The FCC has also adopted rules to permit LPTV and TV translators located in the new wireless band (except the guard bands) to remain on their existing channels during the post-auction transition period until they are notified that a forward auction winner is within 120 days of commencing operations. This could allow continued operations in some locations for a number of years. And just last month, the Commission extended additional channel sharing rights to LPTV and TV translator stations and broadened the rules applicable to other stations to increase the likelihood of displaced stations finding a post-auction channel.

Question 2. **I appreciate that one of your first moves as Chairman was establishing a new Broadband Deployment Advisory Committee. The Commerce Committee has a lot of members with rural states, including my state of Nevada, and deployment is one of the greatest challenges in our rural areas.**

But deployment and access can't be successful without expansion of infrastructure, and utility poles are an essential part of that equation.

Given how technical and complicated pole attachments can be, will this Advisory Committee include any stakeholders from electric companies?

Answer.—Yes. On April 6, 2017, I announced the 29 members selected for the Broadband Deployment Advisory Committee (BDAC). Pertinent to your question, I named Jim Matheson, Chief Executive Officer of the National Rural Electric Cooperative Association and former Utah Congressman, as well as Allen Bell, DOT, Joint Use and Franchise Manager, Georgia Power Company, representing Southern Company.

Question 3. **In Nevada, we have 2.8 million wireless subscribers, and 70 percent of high-speed broadband connections in the state are mobile. We need spectrum to meet this demand and continue innovating, creating jobs, and boosting the economy.**

But time is the critical factor. In the past, it's taken 13 years on average from start to finish to reallocate spectrum. Does the FCC have any tools to maximize the use of bands that are already authorized for commercial use?

Answer.—Yes. And I am proud that the Commission has already taken several actions during my tenure to do just that. For example, in February, the Commission adopted the Mobility Fund Phase II, which will direct $4.53 billion over the next decade to facilitate the deployment of advanced mobile service to rural America, where spectrum too often now lies fallow. Also that month, we certified the first LTE-U devices, paving the way for gigabit LTE through the efficient sharing of unlicensed spectrum with Wi-Fi. In March, the Commission also rolled back its outdated regulations that prevented the use of 800 MHz

cellular spectrum for broadband technologies like LTE, and this month the Commission will be considering a package of reforms aimed at speeding the deployment of wireless infrastructure. Each of these actions should help maximize the use of bands that are already authorized for commercial use.

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C. 20554

Office of the Director

April 10, 2017

The Honorable Bill Nelson
Ranking Member
Committee on Commerce, Science, and Transportation
United States Senate
254 Russell Senate Office Building
Washington, D.C. 20510

Dear Senator Nelson:

Enclosed please find responses to the Questions for the Record submitted for Chairman Ajit Pai regarding his appearance before the Committee on March 8, 2017, at the hearing entitled, "Oversight of the Federal Communications Commission".

If you have further questions, please feel free to contact me at (202) 418-2242.

Sincerely,

Timothy Strachan,
Acting Director

Ranking Member Bill Nelson
Question for the Record
Committee on Commerce, Science, and Transportation
Hearing on "FCC Oversight"

Question 1. What is your vision for fulfilling your roles and responsibilities as the FCC Defense Commissioner?

Answer.—As FCC Defense Commissioner, my top priorities are to ensure the safety and welfare of all Americans, to promote the protection of property, and to support the government's continuity of operations in the event of a national disaster. In this capacity, I will continue to work in close coordination with the Department of Homeland Security, other departments and federal agencies, state and local governments, and tribal and territorial authorities, to promote our nation's emergency preparedness, homeland security, and defense readiness.

Question 2. Since you joined the FCC in 2012, have you reached out to the Department of Defense (DoD) for a briefing on national security spectrum issues? If not, what are your plans to receive such a briefing in the near future?

Answer.—During my tenure as a Commissioner after I joined the FCC in 2012, I unfortunately did not have the pleasure to work with DoD. As Chairman and Defense Commissioner, however, I have discussed national security spectrum issues with DoD. I plan to continue to maintain contacts with my counterpart at DoD and others at the Department, as appropriate, to discuss several areas of mutual interest, including national security spectrum issues. The FCC and DoD have already established a longstanding relationship through the interagency process, and I want to make sure this collaboration continues under my leadership.

Question 3. Given the importance of federal government missions that rely on spectrum access in our nation's interest (i.e., Federal Aviation Administration, DoD, NASA, others), how do you plan to ensure a balance in spectrum policy to meet the needs of both Federal and non-Federal users?

Answer.—Although I support accelerated processes that move spectrum into the commercial marketplace, I am very cognizant of the mission-sensitive needs of our Federal Government partners. Our experience has been that coordination efforts are often complex and engineering-intensive, so we emphasize an objective, data-driven perspective when working with other agencies. As part of this process, the Commission's staff liaises routinely with the National Telecommunications and Information Administration (NTIA) and the various federal agencies. For example, FCC staff participate in NTIA's Interdepartment Radio Advisory Committee (IRAC) and Policy and Plans Steering Group (PPSG), both of which include representatives from the various federal agencies and departments that have responsibilities that requiring significant access to spectrum. During my tenure, we will continue to maintain this productive working relationship with the NTIA and other federal agencies at the highest levels to satisfy our mutual legal mandates.

Importantly, in multiple statutes, Congress has directed the Commission to work with other agencies to provide access to more commercial spectrum through repurposing and sharing federal spectrum. The Bipartisan Budget Act of 2015 aided this process by giving federal agencies the funding to plan for future transitions and spectrum sharing. I look forward to working with federal agencies as we continue to review spectrum use.

Question 4. Given that spectrum is a finite resource, and both federal and non-federal requirements are critical, what are your policy priorities in key areas such as increasing spectrum sharing and access opportunities for both Federal and non-Federal users?

Answer.—We have a crucial role to play in spectrum policy—a role made more critical by resource constraints and potential technical complexity. Since most of the spectrum is occupied, but often on a limited basis in terms of geography or time of use, we must continue to pursue opportunities for sharing spectrum. Technology has advanced in ways that enable meaningful access to spectrum on a shared basis while continuing to protect incumbent users against harmful interference. I also believe that sharing should be done in ways that benefit both Federal and non-Federal users, and we will continue to work with federal stakeholders to find ways to achieve this. We also will continue to identify opportunities for making spectrum available on an exclusive basis. The broadcast incentive auction illustrates that this can be a complex process.

More generally, we need to ensure that the Government's spectrum policies are meeting the needs of all users, Federal and non-Federal. Accordingly, we will continue rely on our talented staff who work on spectrum issues and to maintain our relationships with the NTIA and our federal partners as we try to adapt spectrum policy to the times. In order to help the FCC meet this goal, one key policy priority includes approving new technologies and services within one year, as long required (but oft neglected) under Section 7 of the Communications Act.

Question 5. What are your plans to ensure that ongoing coordination efforts between NTIA and FCC on spectrum policy continue to move forward smoothly?

Answer.—A key FCC priority in this area is to work with the Interdepartment Radio Advisory Committee (IRAC), which is an advisory committee to NTIA that is made up of representatives of the federal agencies. NTIA considers the advice of the IRAC, but has the final say on the position of the Executive branch. The Commission already serves an active liaison role with the NTIA on the IRAC. We also have formal and informal contacts and processes to foster ongoing discussions and coordination with NTIA as well as our sister agencies. I will continue to encourage these relationships, as well as provide leadership directly from my office to facilitate productive negotiations and coordination.

Question 6. I have heard from my local broadcasters that illegal pirate radio stations have been a big problem in Florida. Importantly, those broadcasters tell me that these pirate radio stations interfere with the Emergency Alert System, which is incredibly important given the natural disasters that can affect Florida.

Answer.—I agree, which is why enforcement against pirate radio broadcasters—in Florida and elsewhere—is a priority of mine and will remain that way as long as I am Chairman.

Question 7. What are you doing to address pirate radio stations, both in Florida and nationwide? Will you commit to making combating pirate radio operations a priority during your time as Chairman of the FCC, including devoting sufficient resources to stop these illegal broadcasts? Are you able to use fines and equipment seizures to stop these broadcasts, or do you need additional enforcement authority?

Answer.—I appreciate your concern with the need to combat pirate radio operations. I have directed the FCC's Enforcement Bureau to aggressively pursue pirate broadcasters. Pirate radio can cause interference to other licensed broadcasters and non-broadcast services. And in some circumstances, it can even endanger public safety—for example, by interfering with the signal of a legitimate broadcaster that is delivering an Emergency Alert System (EAS) message. The Commission takes such interference very seriously.

Parties found to be operating radio stations without FCC authority could be subject to a variety of enforcement actions, including seizure of equipment, imposition of monetary forfeitures, ineligibility to

hold FCC licenses, and injunctive relief. Due to the gravity of pirate operations' interference, especially when it comes to public safety, we are also considering whether criminal sanctions may be appropriate in certain situations. The FCC also has the authority to inspect radio installations. Such inspections are done by the Enforcement Bureau's field agents. As for additional enforcement authority, I would be happy to work with you and your staff on any policies that could bolster our enforcement actions against pirate radio violators.

Question 8. As you may know, Westelcom Network Inc., a small fiber-based broadband provider in New York has filed for a limited waiver request with respect to 47 C.F.R.§ 61.26(a)(6) of the FCC's rules – which defines rural competitive local exchange carriers (CLEC). The company lost its classification as a rural CLEC after a 2012 Census Bureau reexamined its classification for Watertown, NY (one of the six counties in Westelcom's service area) and decided to include Fort Drum in its population area for the first time ever. The population increase associated with the military base caused the area to be reclassified from a "rural" to an "urbanized" area. As a result of this new classification, the FCC determined that Westelcom could no longer qualify for the rural exemption rate provided for those entities defined as rural CLECs, despite the fact that Army policy prohibits Westelcom from serving the base.

Because of the change in status, the small carrier will no longer receive the transition period the FCC's 2011 *USF Transformation Order* provided to rural companies and now faces a 96 percent cut in revenue. This has the potential to devastate critical institutions in the region, which receive the bulk of their broadband services from the company. In fact, nearly 100 health care facilities, telemedicine networks, municipalities, and education facilities receive service from the company.

The waiver in question would restore to Westelcom the transition period it unfairly lost and allow the company time to stabilize its operations, consistent with the Commission's goal of ensuring broadband deployment in rural America. Furthermore, we know that continued delays, especially for a small company such as Westelcom, severely harm the future of the company and prevent continued investments in the region. Given your support for rural broadband deployment, what steps will your Commission take to ensure prompt action is taken on this waiver request?

Answer.—Over the last couple of months, my office has been working with Westelcom, Bureau staff, and my colleagues to address this issue. On April 5, after further discussions with the company, my office circulated a revised waiver order that would allow the company to stabilize its operations and maintain its service in rural America. I am working with my colleagues to get that order adopted promptly.

Question 9. Due to the efforts of the company and of your predecessor, a compromised waiver was negotiated to allow a phase-down period for the company. The order was then put on circulation in December of 2016. Despite this, and the fact that the waiver enjoys bipartisan support from Members of Congress, the FCC has not taken official action on it. Is there a reason that action on this deal has stalled? If so, what additional information could this company provide to help the Commission make its decision?

Answer.—Over the last couple of months, my office has been working with Westelcom, Bureau staff, and my colleagues to ensure that Westelcom indeed met the extraordinary circumstances that are normally required for a waiver of Commission rules. During that period, the company was able to provide our staff with additional facts and assurances to make clear that unique situation it faces and to justify that a waiver in this specific circumstance would serve the public interest.

Question 10. Chairman Pai, during the FCC Oversight hearing on March 8, Senator Thune asked you a question about the agency's broadband privacy rules and whether the FCC would still be obligated to regulate broadband provider privacy practices if these rules were repealed using the Congressional Review Act. Specifically, Senator Thune stated, "[i]s it true that consumers would be left unprotected, or would the FCC still be obligated to police broadband privacy practices under Section 222 of the Communications Act?" In your response, you indicated that Senator Thune was correct in his assessment

that the FCC would still play a role in broadband privacy and you state that "the carriers would still have their obligations under Section 222 in addition to other federal and state privacy, data security, and breach notification requirements."

What are the obligations of broadband providers under Section 222 to which you referenced in your answer? Are those specific, enumerable responsibilities that can provide consumers with transparency and certainty about how their data is collected, used, and sold?

Answer.—In the FCC's 2015 *Open Internet Order*, the Commission declined to forbear from the application of Section 222 to broadband providers, stating that the statute "itself directly provides important privacy protections." Among these protections is the right of customers of telecommunications carriers (a category which includes ISPs under the terms of the *Title II Order*), to decide whether and how their customer proprietary network information (CPNI) will be used.

Section 222 imposes a duty on telecommunications carriers to obtain the approval of their customers prior to using or sharing customer proprietary network information (CPNI), subject to certain limited exceptions. Specifically, under Section 222, a telecommunications carrier "shall only use, disclose, or permit access to individually identifiable [CPNI]" to provide the service from which such information is derived or services necessary to, or used in, the provision of such service. In addition, section 222 enumerates specific uses of CPNI that do not require customer approval, including for the provision of 911 service, to protect the rights and property of the carrier, to protect users and other carriers from fraud, and to bill and collect for the telecommunications service.

The Commission has also interpreted section 222 as imposing on carriers a general duty to protect the confidentiality of CPNI, including a duty to take reasonable precautions to prevent the unauthorized disclosure of a customer's CPNI. Though the Commission has adopted detailed regulations to help clarify the applicability of this duty to voice services, the statutory duty applies independently.

With respect to the second portion of your question, yes, section 222 contains specific, enumerated responsibilities, including the points discussed above.

Question 11. Given the FCC's 2015 forbearance from its rules implementing Section 222, how would the FCC act to ensure that broadband carriers meet these obligations that you referred to in your response?

Answer.—As discussed above, in the *Title II Order*, the Commission did not forbear from the application of Section 222, including as it applies to ISPs. The Commission did, however, forbear from applying certain rules that had been implemented pursuant to Section 222 for telephone companies. As such, section 222 and its requirements apply to ISPs, and the Commission has authority to enforce those statutory obligations.

Question 12. Do you believe that the FCC would continue to play a role in broadband privacy if broadband providers were no longer classified as a telecommunications service subject to Title II of the Communications Act? If not, what agency would have that responsibility, especially in light of the 9th Circuit Court of Appeals decision on the scope of the common carrier exception in *AT&T v. FTC*?

Answer.—In the circumstances this question contemplates—and as was the case prior to the FCC classifying broadband as a Title II service in 2015—Congress has given the Federal Trade Commission jurisdiction over broadband privacy. The FTC exercised this role for decades following the commercialization of the Internet in the 1990s, and the evidence shows that it is a highly effective cop on the beat that can and will protect broadband consumers' privacy. The FCC has been, is, and would be ready and willing to offer the FTC any expertise the FCC may have to help them carry out that role.

Question 13. You have indicated that the FCC would need to take time to evaluate the legal implications of a Congressional Review Act resolution of disapproval when it comes to its privacy and data security authority. If that is the case, how can you claim that broadband providers would still have privacy

obligations following enactment of a resolution of disapproval? Would those obligations fall under Section 222, which is only applicable to common carrier services and would not apply should the FCC eventually reverse classification of these services as common carrier services?

Answer.—The CRA resolution which has now become law maintains the *status quo* regarding broadband privacy. Section 222 still applies to broadband providers, and the FCC can take enforcement action under this authority. In the event broadband providers were no longer common carriers, the FTC would be back in the same position it held prior to 2015 of enforcing privacy protections in the online ecosystem.

Question 14. Has the FCC evaluated what privacy and data security rules will be applicable to services that are common carrier services if this resolution is enacted and all of the reforms adopted last year are vitiated?

Answer.—Yes. All rules except those disapproved by Congress and the President in the CRA resolution are applicable to common carriers.

Question 15. Chairman Pai, I serve as ranking member on the Armed Services Committee's Subcommittee on Cybersecurity. We live in a nation, in a world, where so much of what we do relies on connections to IP-based communications networks—and that means bad actors, anywhere in the world—with a keyboard—can potentially hack into those networks and exploit the underlying data. And it happens all-day, every day.

The FCC is the expert agency overseeing our nation's communications networks. Yet you have taken pains to try to make clear in your statements and in recent actions undoing and setting aside the FCC's cyber related items and reports, including staying the FCC's data security rule – that you do not believe the FCC has a role in our cyber defenses. Putting aside, for a moment, the NIST cyber framework, which includes critical infrastructure, or past regulatory debates at the FCC – everyone agrees that we need to be doing more, not less, to protect our nation's communications networks against cyber attack.

If you are keeping the FCC from being part of the solution, are you making it part of the problem?

Answer.—The FCC is very much a part of the solution. The agency has contributed and continues to contribute its subject matter expertise in close collaboration with the Department of Homeland Security, other federal agencies, and industry, to counter cyberthreats. Given the scope of and potential harm from cyberthreats, it's important for all relevant agencies of the government to work together, in coordination with industry, to detect, minimize, and neutralize such threats. To this end, I have and continue to support the FCC's efforts to combat this problem through the established interagency process.

Question 16. Is it tenable for the FCC, as the expert agency over our communications networks, to sit on the sidelines in the battle to protect our nation from cyber attack?

Answer.—Despite the FCC's limited resources, some of our best professionals are working on a dedicated 24/7 basis with our counterparts in both other government agencies and industry to identify, mitigate, and disrupt real and potential threat vectors each and every day. In addition, in just the past year alone, the FCC has adopted rules strengthening and safeguarding our national emergency alert and warning systems. The FCC has also supported DHS and NIST in their development of voluntary industry standards to protect our nation's communications networks.

Question 17. Chairman Pai, throughout its history, the FCC has been active in its enforcement of all rules duly adopted by the agency. That has been true for the agency under the leadership of both Democratic and Republican Chairs. As a result, it surprised me to hear of your announcement in January—before you had officially assumed the Chair of the agency—that you did not intend to enforce the broadband transparency rules duly adopted by the agency in 2015 upon the expiration of the small business

exemption in order. It makes me wonder if there are there other rules adopted by the agency that you do not plan to enforce as Chairman.

Will you commit to this Committee that you will fully enforce the statutes governing the FCC, and the rules duly adopted by the agency, even if you personally disagree with those statutes or rules?

Answer.—Yes.

Question 18. Chairman Pai, one of the responsibilities of the Chair of the agency is to help direct the agency's legal defense of its own actions. I understand that you have chosen not to defend certain rules adopted by the FCC under the leadership of your predecessor. I fear that these moves signal a willingness on your part to walk away from other litigation over actions by your predecessor as a way to undermine those actions—which would cause me great concern.

At present, is there other ongoing litigation in which you intend to instruct your staff not to defend the actions of the agency?

Answer.—No.

Question 19. Chairman Pai, some have suggested that you use the FCC's power to issue interpretive rules to undo key actions taken by the FCC under your predecessor, including the classification of broadband as a common carrier service. The groups who favor this approach suggest that these sorts of interpretive actions would not be subject to full notice and comment requirements under the Administrative Procedure Act (APA), and thus could be taken much more quickly. I would argue that such actions would undermine public faith for the agency, as using this authority would be inappropriate in this context, result in less transparency, and represent hasty decision making built upon predetermined political outcomes.

I know that you disagree with many of the actions taken by the FCC under your predecessor—you clearly have not been silent on that in your time as a Commissioner. But the appropriate way to reconsider those previous actions, including the classification of broadband, is through full and fair rulemakings pursuant to standard APA notice and comment processes. In my opinion, using an interpretive rule would be inappropriate in this context. Will you commit that any major actions you take as Chairman of the agency, including possible action related to the classification of broadband as a common carrier service, will only occur after a full notice and comment rulemaking process that allows adequate time for public comment and consideration?

Answer.—I have long believed that an open and transparent process that gives a full opportunity for public consideration is best. That is why, in one of my first actions as Chairman, I created a pilot program to test the releasing of the draft text of Commission decisions three weeks before a Commission vote. That program was so successful in February that I expanded it to encompass all six items on the March agenda and all seven on the April agenda. Similarly, I have steadfastly believed that Commission must rigorously adhere to the dictates of federal law, including specific requirements of the Administrative Procedure Act. I accordingly commit to doing so going forward.

Senator Maria Cantwell
Question for the Record
Committee on Commerce, Science, and Transportation
Hearing on "FCC Oversight"

Media Ownership and Consolidation

For Chairman Pai

Question 1

You have been an advocate of loosening or eliminating altogether the rules that govern how many broadcast stations and newspapers a company can own in any one market. And it is my understanding that you hold this view because you think the rules don't reflect the current media marketplace.

Part 1

What FCC data are you relying on to support this conclusion?

Answer.—At the outset, I note that the Newspaper/Broadcast Cross-Ownership (NBCO) Rule is currently before the Commission on reconsideration and any subsequent decision to modify or repeal the rule would be based on the record developed in the Commission's media ownership review proceeding. That record contains extensive information about the current media marketplace and support for the conclusion that the NBCO Rule is outdated and harmful.

In my dissent to the August 2016 Second Report and Order that effectively retained the existing ban on the common ownership of newspapers and broadcast stations, I provided an extensive analysis showing that the NBCO Rule—originally adopted in 1975—no longer reflects the current media marketplace. For example, since 1975, approximately one quarter of newspapers in the United States have gone out of business, while others no longer publish on a daily basis or have abandoned the print medium altogether in favor of digital-only distribution, meaning they no longer meet the definition of a daily newspaper under the Commission's rule. And the newspaper industry has been particularly hard hit since 2000, enduring significant declines in circulation, advertising revenues, and employment. Moreover, the Internet has fundamentally transformed the ways in which the American people consume news and information, but the Commission's media ownership rules have failed to keep pace (indeed, they do not factor in the transformative impact of the Internet on media). In light of all this, the government should be finding ways to promote investment in the newspaper industry, not discouraging investment with antiquated regulations that do not reflect the current media marketplace.

For your reference, I have provided a copy of my August 2016 dissent.

Part 2

What evidence do you have that proves consolidated ownership creates more journalism and more jobs?

Answer.—As provided in greater detail in my August 2016 dissent, the record in the media ownership proceeding is replete with studies spanning almost four decades demonstrating that common ownership of newspapers and broadcast stations leads to increased investment in local journalism and improved service in local communities. For example, Commission-sponsored studies from 2007 found that cross-owned television stations provided more news programming, local news coverage, and coverage of state and local politics than non-cross-owned stations. Another Commission-sponsored study from 2007 found that a cross-owned radio station was four to five times more likely to have a news format than a non-cross-owned station. Moreover, owners of grandfathered newspaper/broadcast combinations provided numerous unrebutted examples of how their cross-owned combinations provided more comprehensive news coverage to their local communities, including Atlanta, Cedar Rapids, Milwaukee, Phoenix, South Bend, Spokane, Topeka, and Amarillo.

Question 2

Form 323 is the FCC's tool for gathering data on ownership data from broadcasters, but response rates are low. Historically, broadcasters have faced little to no penalty for noncompliance. Response rates for some broadcast services, such as AM radio, were as low as 79%, a service you have highlighted as important for enhancing ownership diversity.

What steps will you take to ensure that broadcasters provide a full accounting of ownership information?

Answer.—The Commission has been and continues to be engaged in an intensive effort to improve its broadcast ownership data, seeking to reduce the burden on filers and, at the same time, ensure that the data are reliable, searchable, and aggregable. Since adopting a unified biennial filing deadline in 2009, the Commission has taken various steps that have helped improve response rates. In the most recent filing windows, the Commission's Media Bureau has hosted information sessions for Form 323 filers designed to increase awareness of the filing requirement, present an overview of Form 323, conduct a filing demonstration, and address common filing mistakes. The Commission has also engaged in targeted outreach to increase awareness of the sessions. The Commission anticipates that a similar event will be held prior to the 2017 filing period. Prior to the filing periods, the Commission has also released multiple public notices alerting filers of the upcoming filing window. In addition, it is anticipated that the significant improvements to Form 323 adopted in January 2016 will further improve the quality and rate of responses in the upcoming filing.

Now, as Chairman, I intend to explore additional ways to help improve response rates, reduce filing burdens, and improve the overall quality of the Commission's broadcast ownership data. At the same time, I'm taking steps to ensure that our efforts to collect ownership data do not have unintended consequences. For example, at the April 2017 Open Meeting, the Commission will consider an Order to expand options for how noncommercial broadcasters can comply with the ownership reporting requirements.

Question 3

You are on record as saying that the FCC should engage in transparent and data-driven decision making. During your chairmanship you will have an opportunity to preside over the FCC's statutorily mandated periodic review of the FCC's media rules.

As part of this periodic review, the FCC is obligated to gather ownership data every two years.

The 2015 data collection has not been released. The FCC is scheduled to collect media ownership data again in 2017.

Part 1

Will you release the 2015 data collected as a result of the 2015 biennial review of the FCC's media rules within 2 weeks of the submission of your answers to these QFRs? If not, why not?

Answer.—The 2015 data regarding the ownership of commercial broadcast stations collected on FCC Form 323 ownership reports filed biennially by commercial licensees is publicly available on the Commission's website. Currently, the Media Bureau is working to finalize and release a report that analyzes that ownership data in various ways, as it has done in the past. This is a priority for us, and the Commission is working to release that report as soon as possible.

Part 2

Will you commit to keeping the FCC on schedule to conduct, in 2017, a timely and complete data collection regarding the media rules? If not, why not?

Answer.—We are currently on schedule to receive the ownership data for the next biennial filing window that opens this fall. We are in the process of implementing changes to the FCC Forms 323 and 323-E

(ownership forms) to ensure that they reflect the changes adopted by the Commission in 2016, as well as any modifications adopted by the Commission at the April 20, 2017 open agenda meeting. These revised forms should simplify the filing process for licensees, increase the response rate, improve the quality of submitted ownership data, and facilitate the Commission's analysis of that data.

Part 3

Will you commit to collecting and publishing and analyzing the 2017 data collection ahead of any changes or reconsiderations of existing broadcast ownership policies? If not, why not?

Answer.—The 2017 biennial ownership filing window will close on December 1, 2017, after which the Commission, and others, can begin the process of reviewing and analyzing the ownership data. While the Commission intends to analyze the submitted ownership data and release a report as quickly as possible, it is premature at this point to determine whether that timing will coincide with the Commission's resolution of the pending petitions for reconsideration of the 2010/2014 quadrennial media ownership proceeding, which were filed in December 2016.

Private Investment in Broadband after the FCC's February 2015 Open Internet Order

For Chairman Pai

The US Census Bureau's Annual Capital Expenditures Survey for 2015 for the entire telecom industry shows that the total capital expenditures by wired telecom carriers, cable distributors, broadband ISPs, wireless telecom carriers, and telecom resellers increased by more than $550 million over the 2014 level.

Moreover the annual earnings reports of several leading broadband providers' show that investment is up, not down in the two years since the FCC's 2015 order.[1]

Given these facts, what's the basis for your repeated suggestion that the legal definitions underpinning Net Neutrality, and broadband privacy are responsible for any downward change in investment?

In your answer please cite your sources and provide examples where relevant.

Answer.—By looking at data from the Census Bureau's Annual Capital Expenditure Survey (ACES) from 2013 through 2015, the decline in capital investment before and after Title II reclassification is much clearer. Using the ACES data you cite (for wired telecom carriers, cable distributors, broadband ISPs, wireless telecom carriers, and telecom resellers), comparing 2013 (i.e. the year before President Obama announced his desire for Title II re-classification) with 2015 (i.e. the year the FCC reclassified broadband as a Title II service) shows annual capital investment being slightly lower in 2015 compared with 2013. (Sources: Sources: Table 4b at https://www.census.gov/data/tables/2014/econ/aces/2014-aces-summary.html; Table 4a at https://www.census.gov/data/tables/2015/econ/aces/2015-aces-summary.html).

In addition, other third-party sources also indicate an overall decline in investment. Economist Hal Singer finds by tracking investment of twelve major ISPs between 2014 and 2016 that domestic capital expenditures declined by 5.6% or $3.6 billion. (Source: https://haljsinger.wordpress.com/2017/03/01/2016-broadband-capex-survey-tracking-investment-in-the-title-ii-era/) Studies suggesting an increase in overall investment often make critical methodological errors by, for example, counting as domestic network investment a major U.S. carrier's multi-billion dollar investment in upgrading its wireless network in Mexico, or another major U.S. carrier's changed accounting treatment of handsets from an operating expense to a capital expense.

[1] For example, in its most recent earnings report, Comcast—the nation's largest broadband provider—noted that in 2016 year over year "capital expenditures increased 7.5% to $9.1 billion." The lion's share ($7.6 billion) of that $9.6 billion went to the company's Cable Communications division, "primarily reflecting increased investment in line extensions, a higher level of investment in scalable infrastructure to increase network capacity and continued spending on customer premise equipment related to the deployment of the X1 platform and wireless gateways"--that $7.6 billion was an increase of 7.9% over the previous year.

Likewise, AT&T said it its most recent earnings that it spent $22.9 billion on capital investment in 2016, up from $20.7 billion in 2015. Granted, the 2015 number was slightly down from the $21.4 billion spent in 2014, but it's higher than the $19.7 billion or $20.2 billion spent in 2012 or 2011, respectively, seeming to undercut claims of historic low levels of investment.

Broadband back bone company Level 3 Communications, which is currently being acquired by CenturyLink, spent $1.33 billion in 2016, more than it spent in either 2015 ($1.23 billion) or 2014 ($1.25 billion). Cogent Communications, another broadband backbone company, spent $45.2 million last year, up from $35.6 million in 2015.

Next Generation Networks and Smart Cities

For Chairman Pai and Commissioner Clyburn

Smart technologies will enable cities to improve community livability, services, communication, safety, mobility, and resilience to natural and manmade disasters; reduce costs, traffic congestion, air pollution, energy use, and carbon emissions; and promote economic growth and opportunities for communities of all sizes.

Smart City market estimates show rapid growth in coming years, and the number of Internet-connected devices in Smart Cities alone is expected to grow from 1.2 million in 2015 to 3.3 billion in 2018. Mobile broadband is the engine for the proliferation of smart cities.

This aspect of our Internet economy is expected to grow from almost $2 billion in 2015, to $147.5 billion by 2020.

The FCC is the agency charged with making more spectrum available for mobile broadband.

Part 1

Given this rapid growth in Smart Cities technology, what is the Commission doing now to usher in next-generation networks to meet anticipated spectrum demands?

Answer.—In recent years, the Commission has made an unprecedented amount of new spectrum available for flexible wireless use, including technologies that will enable the growth of Smart Cities. These efforts include: (1) the broadcast incentive auction; (2) the Spectrum Frontiers proceeding; (3) the Citizens Broadband Radio Service proceeding; and (4) the AWS-3 auction. In the Spectrum Frontiers proceeding alone, the Commission made available almost 11 gigahertz of spectrum above 24 GHz for licensed and unlicensed fixed and mobile use, proposed to make available 18 gigahertz of additional spectrum, and sought comment on making spectrum above 95 GHz available for commercial use (this last aspect is one I personally pushed in 2015). The Commission also has several ongoing proceedings designed to improve access to and efficient use of a variety of additional spectrum bands and is actively exploring opportunities to expand access to even more spectrum in the future.

Part 2

Does the Commission need additional statutory authority to meet the demand for spectrum?

Answer.—Although the Communications Act, as amended, gives the Commission substantial authority to accommodate the demands for more spectrum, legislation such as the Spectrum Act have played a critical role in advancing the ball. Most recently, the Making Opportunities for Broadband Investment and Limiting Excessive and Needless Obstacles to Wireless Act (also known as the Mobile Now Act) represents an opportunity for the United States to show international leadership in the area of spectrum management and the move to 5G.

Part 3

What is the Commission's role in ensuring that Smart City devices have adequate protections against cybersecurity breaches? If the Commission has no role, which part of the federal government has responsibility for this?

Answer.— The FCC has a role to play within the clear confines of its defined statutory authority to protect the reliability of the Nation's communications industry and to contribute to the primary roles that other agencies like the Department of Homeland Security have to address cybersecurity challenges. The security of America's communications networks is a top priority, but the Commission cannot take action on this issue beyond the role prescribed by Congress. I believe that the industry needs to lead, and voluntary mechanisms are a good way to provide benchmarks and expectations of protections for these providers and consumers.

We have opportunities as network experts to contribute to interagency dialogues related to this topic, and to support the primary efforts of the industry to secure their networks by clearing away red tape or regulatory ambiguities that would impair their ability to effectively plan and execute their cybersecurity responsibilities. The Communications, Security, Reliability, and Interoperability Council (CSRIC) is a good example of this process—a stakeholder-led effort providing the Commission with "in the trenches" insight into proven means to mitigate cyber risks.

Rollout of Next Generation Wireless (5G) Infrastructure

For Chairman Pai

The FCC is currently considering a petition seeking broad pre-emption of state and local authority over rights of ways and siting.

The relief sought by the petitioner seems like a very extreme measure for a problem that's solvable with some outreach, communication and coordination with state and local siting authorities as well as Tribes.

Is the FCC willing to convene a working group with wireless industry stakeholders and representatives of state local and Tribal siting authorities to come up with a game plan for wireless infrastructure deployment that includes things like: information sharing about 5G technology, creating model ordinances, creating model franchise applications and other best practices to streamline the deployment process? If not, why not?

Answer.—At my first open meeting as Chairman, I announced the creation of the Broadband Deployment Advisory Committee, which will consist of wireless industry stakeholders, representatives of state, local, and Tribal government authorities, and others, to consider ways to accelerate the deployment of broadband infrastructure, including 5G wireless service.

FCC Incentive Auction Broadcaster Repack

For Chairman Pai

Senator Shaheen and I sent a letter to the Commission in June 2016 asking that the FCC commit to providing an assessment of whether the $1.75 billion budget and 39 month timeline for the incentive auction repack are sufficient for a successful repack of the broadcasters.

Then Chairman Wheeler wrote back to us later in the year committing to provide the information to us in a timely fashion after the completion of the forward auction.

I understand that the forward portion of the incentive auction is still ongoing.

Will you honor that commitment and send us the information requested at the close of the forward auction? If not, why not?

Answer.—Yes. I have consistently said that broadcasters shouldn't have to pay for relocation costs out of their own pockets. We will know more about the adequacy of the $1.75 billion fund once we receive the cost estimates from broadcasters and have had a chance to review them; these estimates are due 90 days after the release of the Closing and Channel Reassignment Public Notice.

I have also said that it is not the Commission's intention to force stations off the air if they fail to complete their transition to new facilities on schedule. It's premature at this point to determine conclusively whether the 39-month timeframe will be sufficient. We have a transition plan in place that creates a schedule taking into account resource constraints, complex tower facilities, interference between stations, and other important factors. It is designed to minimize viewer inconvenience, efficiently allocate the resources necessary for broadcasters to operate on their new frequencies, and ensure that winning bidders for wireless licenses in the forward auction can deploy in the 600 MHz band in a timely manner. The plan is the product of more than two years of engagement with the broadcast industry, the wireless industry, antenna manufacturers, tower crews, and other stakeholders.

For Chairman Pai: Mobile cybersecurity breaches

There was a GAO report stating that threats to the security of mobile devices and the information they store and process have been increasing significantly.

In 2012, the Government Accountability Office recommended that the Federal Communications Commission encourage the private sector to implement a broad, industry-defined baseline of mobile security safeguards. They specifically asked the commission to continue to work with wireless carriers and device manufacturers on implementing these cybersecurity best practices by encouraging them to implement a complete industry baseline of mobile security safeguards based on commonly accepted security features and practices.

In response to the GAO's recommendation the Commission tasked the Communications, Security, Reliability, and Interoperability Council (CSRIC) to update these cybersecurity best practices. What the council developed were 'voluntary mechanisms' that increased assurance that communication providers are taking the necessary measures to manage cybersecurity risks. It was also to provide implementation guidance to help communication providers use and adapt the 'voluntary' cybersecurity framework.

Part 1

Now that you are Chairman, do you feel that these 'voluntary mechanisms' are adequately protecting consumers from cybersecurity breaches?

Answer.—The FCC has a role to play within the clear confines of its defined statutory authority to protect the reliability of the Nation's communications industry and to contribute to the primary roles that other agencies have to address cybersecurity challenges. The security of America's communications networks is a top priority, but the Commission cannot take action on this issue beyond the role prescribed by Congress. I believe that the industry needs to lead, and voluntary mechanisms are a good way to provide benchmarks and expectations of protections for these providers and consumers.

However, to the extent that network security risks disrupt critical communications services, like 911, the FCC will do whatever we can, with other stakeholders and within our authority, to mitigate those risks. The FCC can act to identify network security risks that jeopardize critical communications services and act, again within the confines of our statutory authority, to reduce them.

We have opportunities as network experts to contribute to interagency dialogues related to this topic, and to support the primary efforts of the industry to secure their networks by clearing away red tape or regulatory ambiguities that would impair their ability to effectively plan and execute their cybersecurity responsibilities. CSRIC is a good example of this process—a stakeholder-led effort providing the Commission with "in the trenches" insight into proven means to mitigate cyber risks.

I would add that to the extent that Congress grants the FCC additional authority and resources in this area, I would faithfully administer those legal and administrative provisions.

For Chairman Pai: Strengthening Controls over Enhanced Secured Network (ESN) Project

In 2013, the GAO was asked to assess the extent to which the FCC has effectively implemented appropriate information security controls for the initial components of the Enhanced Secured Network (ESN) project, and implemented appropriate procedures to manage and oversee it.

The GAO found that in the initial components of the ESN project the FCC did not effectively implement appropriate information security controls. To help strengthen IT and project management controls over the ESN project, GAO recommended in a report released, that the Commission establish standard operating procedures related to project management. These guidance documents instruct officials in performing key project management activities, including cost estimating, scheduling and project scope management.

Part 1

Has the FCC implemented these recommendations? And if so do you feel that the FCC is currently and effectively protecting its systems and information from cyber threats?

Answer.—The FCC's Office of Managing Director has briefed me concerning this issue. I understand that the FCC has come a long way since this report detailed the systems in place in 2012. According to OMD staff, we followed through on the recommendations where they were not superseded by new systematic improvements and built on this program's initial successes to develop a much more secure network that complies with appropriate guidelines, corrects all deficiencies and adheres to legal requirements. Please be assured that I will be working to ensure that we do not repeat past IT failures.

Part 2

If not, do you intend to remedy this problem? If so, how, If not, why not?

Answer.—I have been advised that the FCC has implemented all recommendations and that GAO has verbally committed to closing all 18 open findings.

Question for Chairman Pai: Broadband adoption barriers

Broadband access is not a luxury, it is a necessity. The Internet expands opportunities for commerce and strengthens our economy.

In 2015, the GAO recommended that the FCC more clearly establish the outcomes it intends to achieve when addressing broadband adoption barriers faced by demographic groups with low levels of adoption.

GAO recommended that the FCC revise its strategic plan to more clearly indicate whether addressing broadband adoption barriers is a major priority, if so, to identify the outcomes the commission will strive to achieve.

Part 1

Did the Commission follow these recommendations?

Answer.—Since I have assumed leadership of the Commission, I have made it clear that I intend to support efforts that make broadband more widely available and affordable for all Americans. To that end, I have identified several outcomes that I intend to pursue and have begun implementing changes to strengthen the Commission's work on broadband adoption.

Notably, I have laid out a Digital Empowerment Agenda that proposes concrete steps the Commission and Congress can take to support broadband deployment. I believe this agenda could help bring broadband and digital opportunity to our nation's economically deprived areas. By promoting infrastructure investment, the Commission can encourage competition that will bring affordable broadband to more communities and increase adoption. Additionally, my agenda promotes entrepreneurship and innovation so that firms are incentivized to create businesses that rely on these networks and bring further economic opportunity to low-income Americans.

Part 2

As Chairman, you will have an opportunity to craft a strategic plan for the agency. How do you intend to address broadband adoption barriers in your strategic plan?

Answer.—As Chairman, closing the digital divide, and thus addressing barriers to broadband adoption, will be a core priority reflected in the Commission's strategic plan. The reality is that people cannot adopt broadband where it is not available. Thus, our strategic plan will emphasize a consistent approach to supporting broadband deployment across the nation and particularly in rural America.

Indeed, the Commission is already working towards these strategic goals. In just the first two months of my Chairmanship, we have adopted a plan to advance 4G LTE across the country, approved $2 billion in

support for building out networks to high-cost areas through the Connect America Fund, and established a Broadband Deployment Advisory Committee that will bring together stakeholders to develop a model code for municipalities that wish to encourage broadband investment in their areas. The Commission is also poised to open comprehensive reviews of the legal frameworks for wireline and wireless infrastructure deployment. Our goal is to identify regulatory barriers and evaluate how the Commission can alleviate them. In turn, our aim is to give broadband providers a greater incentive and ability to deploy, maintain, and upgrade their networks to meet the growing demand for broadband—and for more affordable broadband options to be available for low-income and rural consumers.

In the strategic plan, we will build on these efforts and set goals for providing greater regulatory flexibility, streamlining our rules, and encouraging investment in next generation networks. Beyond that, we will stress interagency coordination on efforts to overcome barriers to broadband adoption and outreach to communities about the benefits of broadband.

Question 12

Question for Chairman Pai: Usage-based pricing for mobile and fixed service providers

Access to broadband Internet is crucial to improving access to information, quality of life, and economic growth. A number of mobile and fixed-or-in-home-Internet service providers have begun using a practice known as usage-based pricing. This involves the provider changing the price to customers, or adjusting their service, based on the amount of data they use.

In late 2014, GAO said that the FCC collaborate with providers to develop a voluntary code of conduct to improve communication and understanding of data use and pricing by Internet consumers. GAO concluded that this would help to ensure that the application of usage-based pricing for fixed Internet would not conflict with the public interest.

Part 1

Has the FCC complied with this recommendation? If not do you plan to direct the FCC's compliance?

Answer.—The prior Administration recognized that "the number of consumer complaints regarding [usage-based pricing] by fixed providers appears to be small and that UBP plans are less common for fixed Internet customers than mobile customers, it is unclear that any action is needed at this time." Nonetheless, we will continue to monitor complaints and provider offerings for trends that might indicate that more action is needed.

Part 2

Do you feel that creating a voluntary code of conduct is or would be enough to protect consumers from predatory pricing structures?

Answer.—As the prior Administration recognized, "it is unclear that any action is needed at this time." Nonetheless, we will continue to monitor complaints and provider offerings for trends that might indicate that more action is needed.

Part 3

Do you believe that broadband service providers are providing clear, and transparent pricing and service, and speed information to their customers?

Answer.—Based on agency filings and a review of complaints to the agency, it appears that most broadband service providers are providing adequate information to their customers.

Senator Amy Klobuchar
Question for the Record
Committee on Commerce, Science, and Transportation
Hearing on "FCC Oversight"

Question 1. I've heard from local broadcasters in Minnesota who are concerned about being able to complete the incentive auction repacking process in the required time. In Minnesota we face additional challenges because of our short construction season. For example, International Falls is home to the coldest annual average temperature in the contiguous United States. At 1,505 feet, the KPXM Tower in International Falls is also the tallest structure in Minnesota. I can't imagine any of us would want to climb to the top of it in February. Chairman Pai, how will the FCC work with broadcasters to develop resilient repacking plans that take into account local conditions and unexpected events like severe weather?

Answer.—FCC staff has actively engaged with the broadcast industry, the wireless industry, antenna manufacturers, tower crews, and other stakeholders for more than two years to develop the Transition Scheduling Plan, which was released in January. The plan details how the FCC will determine the order and schedule of stations' channel moves. The plan is designed to minimize viewer inconvenience, efficiently allocate the resources necessary for broadcasters to operate on their new frequencies, and ensure that winning bidders for wireless licenses in the forward auction can deploy in the 600 MHz band in a timely manner. The Closing and Channel Reassignment Public Notice that signals the formal close of the auction will also detail the final schedule and explain how the Commission staff adjusted the schedule to reflect the realities of weather and major events in places like International Falls.

Question 2. Rural call completion is an important issue for me. It is simply unacceptable that residents and businesses in rural areas have to cope with calls that never connect. My Improving Rural Call Completion and Reliability Act, which I introduced with Senators Tester and Thune, passed the Commerce Committee in January. Chairman Pai, how could a registry of intermediate providers as is called for in my bill help improve service for rural consumers?

Answer.—Wherever you live—whether it's Pittsburg, Kansas, or Pittsburgh, Pennsylvania—and whatever technology you use—whether it's a landline, a cellphone, or VoIP—your phone should ring shortly after your number is dialed. The pending bipartisan rural call completion legislation would help the Commission target providers in the path of a long distance call, known as intermediate providers, who may not be completing calls to rural areas in order to avoid the higher costs associated with delivering such calls. The legislation could help increase the reliability of intermediate providers by requiring them to register with the agency and comply with service quality standards, and in the process improve call completion to rural areas. Commission staff stands ready to work with your staff and provide technical assistance on the proposed legislation.

Question 3. I have been advancing legislation to make broadband deployment easier by requiring coordination between state departments of transportation and broadband providers during construction projects so that they only have to "dig once." A provision based on my legislation passed the Commerce Committee in January as part of the MOBILE NOW Act. Chairman Pai, how can dig once policies improve broadband access in rural America?

Answer.—I believe we must make dig once policies a central tenet of our nation's transportation policy. The concept is simple: every road and highway construction project across America, including those in rural areas, should include the installation of the conduit that can carry fiber optic cables. Installation is the most expensive part of any new broadband deployment, so it's common-sense to leverage construction that will take place anyway to put in place the necessary conduit. Cities like Seattle enacted dig once policies long ago and now have extensive public conduit that the private sector has used to lower

the cost of deployment. Policies like dig once can provide innovators with greater incentives to build out their own broadband networks, upgrade their equipment, and focus on serving their customers. That's especially important in rural areas, where the private-sector case for broadband deployment is much more difficult. Dig once has been successful on the local level, and I hope it soon becomes the law of the land.

Question 4. Chairman Pai, you recently announced the formation of the Broadband Deployment Advisory Committee to make recommendations and offer best practices on accelerating broadband deployment. While best practices and policy recommendations can be useful, many local governments do not have the resources or expertise to implement them. How can the FCC support local governments as they look to implement recommendations from the Broadband Deployment Advisory Committee?

Answer.—One of the key tasks the Broadband Deployment Advisory Committee will be asked to do is draft for the Commission's consideration a model code for broadband deployment, which will cover topics like local franchising, zoning, permitting, and rights-of-way regulations. The model code will be a particularly valuable tool for communities that desire access to broadband but lack, as you note, the resources or the expertise to develop policies conducive to deployment. The FCC last week announced the membership and structure of the BDAC, and it will commence deliberations this month.

Question 5. As co-chair of the Next Generation 911 Caucus, I know our nation's 911 system is in urgent need of upgrades. I am the Senate sponsor of Kari's Law, which would ensure that multi-line telephone systems allow direct dial 911 without the need for prefixes. The bill passed this Committee in January and I am hopeful it will be considered by the full Senate soon. Chairman Pai, I thank you for your advocacy on this important issue. Based on your experience, are there technological solutions for those that use multiline telephone systems to implement the reforms contained in Kari's Law?

Answer.—First, I am heartened to see that Kari's Law is one step closer to becoming the law of the land. We all owe Kari's father, Hank Hunt, a debt of gratitude for his decision to press forward and help ensure that every call to 911 goes through. Second, I look forward to working with Congress on these and other important issues as Chairman of the FCC, and I salute you for your leadership on this and other public safety issues. Third, this is an issue that has been near and dear to me and that I've championed for several years at the FCC. As a Commissioner, I worked with hotel chains, for example, to promote their voluntary efforts to provide 911 direct dial capabilities to hotel guests. The FCC itself instituted direct dialing through the basic programming parameters of its multi-line telephone system (MLTS). This is a simple best practice that should be universally implemented on all MLTS and campus/in-building systems.

Question 6. Today access to broadband is a critical part of students' learning. However, 41 percent of those living on rural Tribal lands do not have access to broadband. Some have proposed a "Tribal priority" for the E-Rate program to close the digital divide as it relates to Indian education. Chairman Pai, what more can the FCC do to make sure that students living on reservations have access to broadband in school?

Answer.—I share your concern for closing the digital divide. In my first remarks as Chairman of the Federal Communications Commission to the agency's staff, I stressed that one of my top priorities would be to close the gap between "those who can use cutting-edge communications services and those who do not."

In February, the Commission adopted the Tribal Mobility Fund Phase II, which will direct approximately $340 million to build out 4G LTE coverage on Tribal lands. Additionally, I circulated to my colleagues an order that would assist carriers serving Tribal lands in deploying, upgrading, and maintaining modern high-speed networks. The proposal would allow carriers serving Tribal lands a greater ability to recover operating expenses, thus improving the financial viability of operating a broadband network serving Tribal lands.

E-rate plays a vital role in helping schools and libraries connect to high-speed Internet. In the past two funding years alone, E-rate disbursed over $66 million to schools and libraries identified as Tribal. This is why I have called E-rate "a program worth fighting for."

Before I became Chairman, I proposed a student-centered E-rate program that would reduce the amount of paperwork that E-rate applicants must file to receive funds, cut back on the complexity of current E-rate regulations, and reduce wasteful spending. Additionally, my proposed changes would significantly increase the support that rural and remote applicants, many of whom are Tribal schools and libraries, receive. Such changes would account for the significant barriers that many Tribal schools and libraries face in attempting to connect to high-speed broadband. I look forward to working on these issues further during my tenure as Chairman.

Question 7. Chairman Pai, what can we do to increase broadband coverage on Tribal lands more broadly?

Answer.—I share your desire to address the digital divide on Tribal lands, where approximately 40% of the population live in census blocks lacking fixed broadband of 25/3 Mbps. In the first three months of my Chairmanship, we've already taken a number of actions to connect those on Tribal lands. As discussed above, at the February Open Meeting, we adopted the Tribal Mobility Fund Phase II, which will direct approximately $340 million to build out 4G LTE coverage on Tribal lands. I have also asked the Commission's Office of Native Affairs and Policy to coordinate with the Wireless Telecommunications Bureau and the Wireline Competition Bureau to help direct that funding to reach Tribal members in remote areas that would otherwise be without access to next generation services.

Additionally, in early February, I circulated to my colleagues an order that would assist carriers serving Tribal lands in deploying, upgrading, and maintaining modem high-speed networks. The order recognizes that carriers serving Tribal lands incur costs that other rural carriers do not face, resulting in significantly higher operating expenses to serve very sparsely populated service areas. The proposal would allow carriers serving Tribal lands a greater ability to recover operating expenses, thus improving the financial viability of operating a broadband network serving Tribal lands. I also directed the Universal Service Administrative Company to give additional time to Tribal families living in the remote reaches of the Navajo Nation to comply with a certification deadline for the Lifeline program. We must work to bring the benefits of the digital age to all Americans, and we will continue to pursue common-sense regulatory reforms to close the digital divide on Tribal lands.

Question 8. A provision based on my Rural Spectrum Accessibility Act – which I introduced last Congress with Senator Fischer – was included in the MOBILE NOW Act that passed the Commerce Committee in January. This provision would require the FCC to explore ways to provide incentives for wireless carriers to lease unused spectrum to rural or smaller carriers in order to expand wireless coverage in rural communities. Chairman Pai, what incentives could be useful for encouraging large carriers to lease spectrum to smaller, rural carriers?

Answer.—Promoting the deployment of robust mobile broadband service in rural communities is one of my top priorities as Chairman. High-speed mobile coverage is increasingly critical to rural America for everything from the app economy to precision agriculture.

The Commission's spectrum licensing rules are intended to lower regulatory barriers to spectrum leasing for small and rural carriers, including rules that streamline the regulatory process for leasing spectrum. Our rules also provide parties with great flexibility in the partitioning and disaggregation of licensed spectrum. We will continue to explore ways to eliminate unnecessary rules and regulatory barriers in order to encourage small rural carriers (among others) to expand wireless coverage in rural communities to deliver mobile broadband to all Americans.

In addition, because deployment by rural carriers on leased spectrum counts toward the primary licensee's construction benchmark, adopting and enforcing meaningful construction requirements that require

licensees to build out in rural parts of their license area in order to keep their license at the end of the term incentivizes carriers to lease spectrum to rural carriers. In other words, in these situations, large carriers have incentives to lease spectrum to rural carriers that have the ability and expertise to deploy coverage in rural areas.

We also need to continue to think about further steps in this area. For instance, in my September 2016 speech outlining my Digital Empowerment Agenda, I proposed to increase the buildout obligation associated with an initial license to 95% and extend license terms from 10 to 15 years. This would substantially increase rural coverage and also make build-out more economically feasible for carriers by providing an additional five years of certainty.

Question 9. The FCC has taken a number of enforcement actions against companies for cramming, including a record level joint FCC-FTC settlement with AT&T. Consumers have enough to worry about with ever-changing technologies and plan options. They need to know that they are being billed fairly. Chairman Pai, how do you plan to combat cramming and prevent scammers from moving on to new technologies?

Answer.—Cramming often results in significant consumer harm because the unauthorized charges are often small amounts and can go undetected by consumers for many months, and they are typically not disclosed clearly or conspicuously on a multipage telephone bill. Further, consumers who receive electronic bills or who have authorized automatic deductions from their bank accounts for payment of monthly invoices are especially vulnerable, because they may not even look at their bills prior to payment. Under Section 201(b) of the Act, the Commission can pursue action against telecommunications service providers that bill for unauthorized services or assess other unauthorized charges on consumer telephone bills. As you note, the Commission has taken a number of enforcement actions to protect consumers in this area, and we will continue to aggressively pursue companies that seek to scam and cram consumers in violations of our rules. In addition, we have actively been monitoring consumer complaints and other sources of information to determine whether scammers are migrating to other platforms or technologies to cram charges on customers' bills. As scammers extend cramming-like actions to other technologies, we will carefully explore our authority to take enforcement action against this type of behavior.

Question 10. Consumers have made it clear they do not want robocalls invading their privacy and disrupting their lives. Earlier this year, I joined Senator Markey and several other Senators on this Committee in calling for the FCC to protect consumers from receiving unwanted and intrusive robocalls. Chairman Pai, I was glad to see in your response that you share our commitment to combatting robocalls. One particular strategy that has been effective is the Robocall Strike Force made up of more than 30 companies in the telecommunications industry. Will you commit to continue to convene the Robocall Strike Force with the support of the FCC?

Answer.—Robocalls are consistently a top consumer complaint to the FCC from the public. It is reported that U.S. consumers have been bombarded by an estimated 2.4 billion robocalls in a single month. Last month, the Commission took important next steps to combat the scourge of robocalls by proposing rules to permit providers to block spoofed robocalls when the caller uses an unassigned or invalid phone number. The proposed rules also would allow providers to block spoofed robocalls when the subscriber to a particular telephone number requests that calls originating from that number be blocked (sometimes called a "Do-Not-Originate" request). We also seek comment on further steps the Commission could take to protect consumers and empower voice service providers to block illegal robocalls. I strongly support the good work done by the industry-led Robocall Strike Force, which made significant progress toward arming consumers with call blocking tools and identifying ways voice providers can proactively block illegal robocalls before they ever reach the consumer's phone. The Commission is committed to helping industry and consumers stop unwanted robocalls, including by encouraging companies to adopt robocall

blocking technologies and working to develop comprehensive solutions to prevent, detect, and filter unwanted robocalls.

Senate Commerce Committee

March 2017 - FCC Oversight Hearing

Senator Blumenthal's Questions for the Record

All questions are for Chairman Pai.

FCC rulemaking is governed by the Administrative Procedure Act ("APA"). Before adopting the 2015 *Open Internet Order*, the agency established a clear record demonstrating the need for the rules. The FCC also explained the legal framework governing its conclusion that broadband internet access service ("BIAS") should be reclassified as a telecommunications service.

The order found that consumers make decisions on broadband primarily based on the service's speed and ability to transmit their data. BIAS providers market and price their services based on this transmission capability – and not on any sort of information storage and processing function that BIAS providers may offer on the side (such as e-mail).

And consumers do not confuse their broadband provider with their e-mail provider or the websites they visit. They are able to distinguish between content on the internet and the provider of their access to that content.

Therefore, the FCC rightly concluded that "broadband Internet access service is marketed today primarily as a conduit for the transmission of data across the Internet." For that reason, broadband internet access is a telecommunications service that offers the public the ability to transmit information of users' choosing, rather than an information service.

As the *Open Internet Order* explained, this legal classification is essential to the adoption of rules prohibiting internet blocking and other forms of unreasonable discrimination by broadband providers. When it struck down previous iterations of the open internet rules finally upheld last year, the DC Circuit Court of Appeals explained that the rules against blocking "impos[e] *de facto* common carrier status on providers of broadband Internet access service in violation of the Commission's [earlier] classification of those services as information services."

In other words, there is no clear path – under the Commission's current statutory authority and controlling judicial precedent – to preserve the FCC's rules against blocking, throttling, and paid-prioritization in the absence of the telecommunications services classification.

You have suggested that you view the *Open Internet Order* and its classification decisions as a mistake. Yet you testified that you understand the value of the open internet, which the order's legal framework and rules protect.

As you know, any steps you take to undo the rules and the Commission's prior legal interpretations would be governed by the APA, just as the adoption of those rules were.

<u>Question 1.</u> Do you agree that a change in administration alone is not a sufficient basis to undo an independent regulatory agency's rulemaking?

Answer.—I fully support and will abide by the Supreme Court's decision in *FCC v. Fox Television Stations*, in which the Court laid out the legal standard for reversing an agency's rulemaking: "An agency may not . . . depart from a prior policy *sub silentio* or simply disregard rules that are still on the books. . . . And of course the agency must show that there are good reasons for the new policy. But it need not demonstrate to a court's satisfaction that the reasons for the new policy are *better* than the reasons for the

old one; it suffices that the new policy is permissible under the statute, that there are good reasons for it, and that the agency *believes* it to be better, which the conscious change of course adequately indicates." 556 U.S. 502, 515 (2009) (emphasis in original).

Question 2. Do you agree that you would need a factual record and legal analysis sufficient to reverse course yet again, just two years after the order was adopted and less than one year after it was upheld in court, should you decide to pursue your promise to undo the *Open Internet Order*?

Answer.—As stated above, the FCC is bound by the standard outlined by the Supreme Court in *FCC v. Fox Television Stations* governing the legality under the Administrative Procedure Act of agency action that represents a policy change.

Question 3. Do you agree that if an independent commission reviews a past decision, it should do so with an open mind and not pre-judge whether facts and circumstances have changed?

Answer.—Yes.

Question 4. In light of the DC Circuit's several decisions on this issue, can you articulate any basis for retaining rules that prohibit broadband providers from blocking, throttling, and prioritizing websites unreasonably in the absence of the telecommunications services classification you so often attack? Or is it your intention to eliminate these rules – ignoring the factual record and legal analysis that undergirds them – based on your disagreement with that legal framework?

Answer.—I support a free and open Internet and I oppose Title II. I am currently reviewing the Commission's options for moving forward with respect to this issue.

Senator Brian Schatz

Question for the Record

Committee on Commerce, Science, and Transportation

Hearing on "FCC Oversight"

Question 1. AT&T – Time Warner Merger

1. Have you asked for information from either AT&T or Time Warner about the transaction, including information related to how any spectrum licenses presently held by Time Warner or its subsidiaries will be dealt with in the transaction?

   Answer.—Congress has not tasked the Commission with reviewing mergers or transactions generally. Instead, section 310 of the Communications Act extends our authority only to transfers of licenses or the transfer of a control of a corporate entity that holds FCC licenses. With respect to AT&T's proposed acquisition of Time Warner, the companies have not filed any application for the transfer of control of a license or transfer of control of a corporate entity that holds a license, and the companies have stated they do not anticipate that Time Warner will transfer any of its FCC licenses to AT&T. As a result, the Commission has not asked for information from either party.

2. Has the FCC conducted its own analysis of the transaction to make sure that it was not set up to evade FCC review? If not, please conduct such an analysis.

   Answer.—Because the companies have not filed and apparently will not file any application for the transfer of control of a license or transfer of control of a corporate entity that holds a license, the Commission has not conducted an analysis pursuant to section 310 of the Communications Act of the kind you describe.

3. What is the FCC's authority over a transaction that has been structured to evade FCC review?

   Answer.—The test for FCC jurisdiction remains whether the parties to a transaction seek a transfer of control of a license, or of a corporate entity that holds a license. If there is no such transfer sought, the agency lacks jurisdiction under the Communications Act to review the matter. However, should a party transfer FCC licenses without having first obtained any required regulatory pre-approvals, the FCC would have authority to take action, including by issuing monetary forfeitures and/or revoking any unlawfully transferred licenses. For example, if Time Warner were to transfer a broadcast license to AT&T without first seeking Commission approval, the Commission could revoke that license and prohibit AT&T from broadcasting in that licensed area on that licensed channel.

Question 2. Unlicensed Spectrum

1. The FCC has recognized that there is a need for providers to have access to low, mid and high-band spectrum. Each meets different requirements because, among other things, they have different propagation characteristics. I was very encouraged that the Commission made high-band spectrum available for unlicensed use in the recent Spectrum Frontiers proceeding. But, I understand that recent studies from the Wi-Fi Alliance and others indicate that there will be a significant shortfall of mid-band unlicensed spectrum in the upcoming years.

- Do you agree that there is a need to identify additional mid-band spectrum for unlicensed use?

Answer.—Yes.

· What options are the Commission exploring to meet this now-well documented need?

Answer.—The Commission is exploring a number of paths toward meeting the need for more unlicensed spectrum that could be used for innovative technologies like Wi-Fi and Bluetooth. For instance, we continue to work aggressively to identify additional unlicensed spectrum in the 5 GHz band. Currently, we are performing testing to determine whether unlicensed might share the 5.9 GHz band with transportation services. This band is particularly attractive because it is adjacent to spectrum that is already used by unlicensed.

We also have made spectrum available at 3.5 GHz that includes provisions for "licensed-light" operation that is similar to unlicensed. And, we have made an additional 7 GHz available for unlicensed at 64–71 GHz, which together with existing rules permitting unlicensed operations in the 57–64 GHz creates a huge 14 GHz band ripe for innovative use. Finally, we stand ready to work with Congress to identify more opportunities to free up spectrum for unlicensed use. One bill we've actively engaged on is the "MOBILE NOW Act," which calls for identifying 100 MHz of spectrum for unlicensed below 6 GHz.

2. In the Middle Class Job and Tax Relief Act, Congress identified the need for additional unlicensed spectrum and requested the FCC and NTIA to conduct studies on 5350-5470 MHz and 5850-5925 MHz bands. I understand that after 5 years, the studies have not provided us with a way forward at 5350 MHz, and the FCC continues to examine prospects for sharing at 5850 MHz. In the meantime, the need for additional unlicensed spectrum has continued to grow, as evidenced by recent spectrum needs studies.

· If sharing in the 5350-5470 MHz band is not feasible, what are the alternatives?

Answer.—As I've noted several times before, this Committee deserves credit for drawing attention to the 5 GHz band in the 2012 Act. Congress directed the affected agencies to evaluate known and proposed spectrum sharing technologies and risks to Federal users if unlicensed wireless devices were allowed to operate in the 5.850-5.925 GHz band.

But right now, this band is designated for vehicle to vehicle use. I have directed the Commission's staff to move ahead expeditiously with this matter while maintaining a data-driven process designed to elicit the best engineering solutions and allay concerns about co-existence.

There are also a number of bands the FCC teed up in its Spectrum Frontiers proceeding, which focuses on spectrum above 24 GHz. Some of this spectrum could be used for unlicensed operations; the agency is actively studying this issue.

· A number of Wi-Fi companies believe that 6 GHz is a potential opportunity for unlicensed designation. Would you agree that this is a good band to examine for unlicensed use?

Answer.—I favor examining as many bands as possible for potential innovative uses, and would be happy to work with you on the 6 GHz band in particular.

· What are the next steps you'd recommend to move forward here?

Answer.—I am aware that the Wi-Fi industry is exploring ideas for accessing spectrum above 6 GHz. It is far too early to know whether this effort will bear fruit, but I can assure you we will encourage innovation and consider any potential new technologies and services within the one year period that I have mentioned in previous statements. The lack of service rules will not impede technological development or innovative band use—we will do whatever is

necessary to get the spectrum out there, put the bands on the table and let the engineers and the marketplace help us decide the best use.

Senator Ed Markey
Question for the Record
Committee on Commerce, Science, and Transportation
Hearing on "FCC Oversight"

Chairman Pai: In 2015, I sent a letter to the FCC urging the Commission to keep the Boston FCC office open. This office promotes public safety by preventing communications interference involving local police departments and emergency response organizations, among other functions. I shared my concern that reducing and relocating Boston's agents could disconnect the FCC from local incidents, potentially challenging the FCC's ability to maintain the 24-hour response standard. Instead of eliminating this office, the FCC restructured its local field offices and maintained the Boston office. What are your future plans for this important Boston office?

Answer.—I agree with you on the importance of FCC field offices. As I stated in my statement on the 2015 field reorganization plan, "The Enforcement Bureau's field agents perform essential work. They resolve interference that threatens public safety communications. They ferret out pirate radio operators. And they play a critical role in ensuring that everyone complies with the Commission's rules." (My statement is available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-81A2.pdf.) Regarding the Boston field office, a Senior Agent was recently selected for that office and is responding to area signal interference complaints. The Enforcement Bureau is monitoring the office workload and if necessary, will make staffing modification recommendations.

Senate Committee on Commerce, Science, and Transportation
Questions for the Record - "Oversight of the Federal Communications Commission"
Hearing held on Wednesday, March 8, 2017
Senator Cory Booker

Questions for Chairman Pai:

Lifeline

Question 1: As you know, I recently joined Senator Blumenthal on a letter asking you to explain your decision to revoke Lifeline Broadband Provider status for nine companies. Thank you for your response, but given your directive to revoke Lifeline Broadband Provider (LBP) status for nine carriers, whose petitions for LBP status now return to "pending," I wanted to ask you additional questions.

The very first issue you addressed in your written testimony is closing the Digital Divide. The Universal Service Fund is designed to do exactly that. Will you commit not to cap the budget for, or otherwise curtail, Universal Service programs?

Answer.—As you know, the Universal Service Fund comprises four different programs under one umbrella: the rural healthcare program, the high-cost program, the E-Rate program, and the Lifeline program. Currently, the first three of these programs are subject to caps, based on the bipartisan decisions of past Commissions. Going forward, the FCC must balance the goals of universal service with the fact that dollars are scarce and need to be directed in a fiscally responsible way. As Chairman, I intend to continue to balance these factors as the FCC implements the statute and aims to close the digital divide.

Question 2: Broadband providers who saw your recent decision may worry that the rug will be pulled out from under their investments if they try to enter the market for Lifeline broadband services. What is your plan to encourage broadband providers to participate in Lifeline so that low-income households have the choice and competition that helps us close the Digital Divide?

Answer.—As I said in my statement last month on Lifeline, "I want to make it clear that broadband will remain in the Lifeline program so long as I have the privilege of serving as Chairman. And we will continue to look for ways to make the program work even better." I also explained that "as we implement the Lifeline program—as with any program we administer—we must follow the law. . . . Congress gave state governments, not the FCC, the primary responsibility for approving which companies can participate in the Lifeline program under Section 214 of the Communications Act." Hundreds of companies have been approved to participate in the Lifeline program through a lawful process which properly allows the state to designate Lifeline providers if they so choose. Indeed, over 99.6% of Americans currently participating in the broadband portion of the program receive service from a company designated within the strictures of the law. New companies can enter the program using existing processes, and I encourage them to continue to do so.

Competition in the Wireless Market

Question 3: Former Chairman Wheeler spoke often about competition in the wireless broadband market, and that the FCC, Congress, companies, and communities must always foster more competition, because it is important for lowering prices and fostering innovation.

How do you view competition in the wireless market right now? Would consolidation reduce competition and give consumers in my state less choice?

Answer.—I believe the current wireless marketplace is highly competitive. The national wireless carriers compete vigorously on price and service (recently, all national carriers either introduced new unlimited data plans or expanded old ones), and many smaller carriers compete to serve consumers in cities and towns across the country. I'm committed to fostering continued innovation and investment across the

mobile ecosystem to promote consumer welfare. Whether consolidation would benefit or burden competition is a fact-specific question; for my part, I will continue to prioritize regulatory decisions that further advance consumer benefits like lower prices, broader availability, and more flexible service options.

Broadband Privacy

Question 4: The FCC blocked broadband policy rules that were set to go into effect in March 2017. Among the rules to go into effect were data security practices to require ISPs and phone companies to take "reasonable" steps to protect consumers' information, like Social Security numbers, financial and health information, and such. The rules were not prescriptive, but would require these companies to basically show they had a plan.

What is the plan now to protect consumers?

Answer.—Section 222 of the Communications Act gives the FCC authority to address violations by a common carrier of its customers' privacy. The FCC's Enforcement Bureau has existing guidance in place governing how ISPs must comport with this requirement. Since the privacy rules never went into effect, consumer privacy protections remain as they were over the past two years.

Going forward, I intend to work closely with the Federal Trade Commission to ensure that consumers continue to be protected under a uniform privacy regime for the entire online ecosystem.

Media Ownership

Question 5: In 2015, researchers at Rutgers University studied the impacts of journalism in three New Jersey communities. They found that lower-income communities suffer from a lack of local news sources, and generally receive their news from a smaller range of sources than wealthier communities.

I am deeply concerned about the lack of diversity in media ownership. The FCC is supposed to collect data on media ownership every other year, but the 2015 data has not been released.

Now that the FCC's 2017 deadline for data collection is approaching, what is your plan to ensure that this data is expeditiously collected, analyzed, and released to the public?

Answer.—The Commission collects broadcast ownership data on a biennial basis and immediately makes the collected data available to the public via the Commission's website. In addition, the Media Bureau releases a biennial report that analyzes the submitted data in various ways.

We anticipate that recent modifications to the Commission's broadcast ownership report forms will improve the quality of the data submitted to the Commission and enable us to analyze submitted data more quickly and accurately. The Commission is in the process of implementing changes to the Form 323 and Form 323-E to ensure that they reflect the changes adopted by the Commission in 2016, as well as any modifications that may be adopted by the Commission at the April 20, 2017 open agenda meeting. These revised forms should simplify the filing process for licensees, increase the response rate, improve the quality of submitted ownership data, and facilitate the Commission's analysis of that data.

Spectrum/5.9 GHz Band

Question 6: In order to unlock the full benefits of Gigabit Wi-Fi, American consumers need access to more unlicensed spectrum in the 5 GHz band. As pointed out in a new study for the Wi-Fi Alliance, we need more contiguous unlicensed spectrum to support the 160 MHz wide channels used by Gigabit Wi-Fi.

What is the Commission's plan for moving forward in the near term to authorize shared unlicensed use of the 5.9 GHz band to bring American consumers faster, better Wi-Fi?

Answer.—As you know, we are performing testing to determine whether unlicensed operations might share the 5.9 GHz band with transportation services. This band is particularly attractive because it is adjacent to spectrum that is already used by unlicensed operators. I am confident that we will conclude

this testing process in the near term and move forward using engineer-based solutions to maximize the opportunities for efficient spectrum use, including by expanding unlicensed access to spectrum.

Question 7: As you know, in the previous Congress, I joined with Senator Marco Rubio to introduce bipartisan legislation that would have explored whether it's possible to safely share unlicensed spectrum with vehicle safety technology in the 5.9 GHz band. I'm pleased that your agency, with DOT and the Commerce Department have been testing prototype technology to determine if it is possible to safely share this precious band, and see whether it can be used without interfering with V2V – or vehicle-to-vehicle communications.

How will the Commission move forward with this project? What are next steps?

Answer.—Right now, this band is designated for vehicle-to-vehicle and vehicle to infrastructure use. Wi-Fi stakeholders have proposed alternatives to share this band while protecting most of the applications that are being considered, and I am confident that we can find a solution.

This band is attractive for Wi-Fi because it's contiguous with the lower adjacent band already used for Wi-Fi. Also, if you look higher or lower in the spectrum chart, I think you'd be hard pressed to find a band that has fewer hurdles to getting it into consumers' hands. Both Qualcomm (with its re-channelization approach) and Cisco (with its detect and avoid approach) have identified paths forward.

The Commission is working collaboratively with other government agencies, such as the U.S. Department of Transportation and the U.S. Department of Commerce's National Telecommunications and Information Administration, to ensure appropriate testing in the 5.9 GHz band to mitigate the risk of harmful interference with Intelligent Transportation Systems (a component of which is the transportation-related technology called Dedicated Short-Range Communications, or DSRC).

The cooperating agencies developed a three-phased testing plan that would involve reviewing equipment in the FCC's Columbia Lab, testing sample/prototypes off-campus utilizing DoT facilities and procedures, and tests in real-world scenarios. We received nine devices for testing from five different companies and performed most of the bench tests as planned.

Although we had hoped to conclude and submit the Phase 1 test results by January 15, 2017, the results of those tests showed a clear need for supplemental testing. We need to better understand the potential interactions between U-NII and DSRC devices. To date, we've generated thousands of data points that our engineers are analyzing. Our staff is also working with DoT and NTIA looking towards the next steps of field testing.

We need to finish these additional tests before moving on to Phase 2. Our engineers have been in touch with engineers at DoT to begin planning Phase II which will involve some basic field testing and then Phase III will involve real-world testing.

The collection of relevant empirical data will assist the FCC, DOT, and NTIA in their ongoing collaboration to analyze and quantify the interference potential introduced to DSRC receivers from unlicensed transmitters operating simultaneously in the 5.850-5.925 GHz band.

Question for the Commissioners:

TCPA

Question 8: I understand that on July 28, 2016, a group of managed care providers petitioned the FCC seeking declaratory ruling and/or clarification of the TCPA to reconcile the regulation of a health plan member's telephone number under the TCPA with the regulation of the same use under the Health Insurance Portability and Accountability Act ("HIPAA").

The Petitioners argue that a clarification is necessary to harmonize the TCPA, HIPAA, and prior Commission rulings to protect member health care communications. The calls covered by these clarifications fall within categories recognized by the Department of Health and Human Services as

covered by HIPAA to enhance the individual's access to quality health care. HIPAA, as you know, regulates the privacy practices of covered entities and expressly encourages and permits such calls to be made. Congress passed HIPAA in 1996 and the HITECH Act in 2009, well after the TCPA, which was enacted in 1991. HIPAA and the HITECH Act, therefore, represent the more recent intent of Congress in regulating these specific types of communications.

What is the Commission's view on protecting non-telemarketing calls allowed under HIPAA in light of their unique value to and acceptance by consumers?

What is the Commission's view on acting to protect these calls expeditiously so that beneficiaries' access to health care is not jeopardized, rather than waiting for a larger "omnibus" TCPA ruling that could take much longer?

Answer.—The treatment of non-telemarketing healthcare calls subjected to HIPAA has been raised in a Joint Petition filed by WellCare Health Plan (WellCare), among others. The petition is under consideration by the Commission and we have sought public comment on the matter. The comment cycles have been completed and Commission staff is carefully reviewing the record in the proceeding. And FCC staff have met with WellCare and the other petitioners several times to discuss their request. I can assure you that we will take into consideration the issues and concerns presented by all stakeholders as the Commission makes every effort to conclude its review as quickly and equitably as possible.

Senator Tom Udall
Senate Committee on Commerce, Science, and Transportation
Hearing on "Oversight of the Federal Communications Commission"
March 8, 2017

Questions for the Record from U.S. Senator Tom Udall

To the Hon. Ajit Pai, Chairman, Federal Communications Commission:

1. The FCC website and Universal Licensing System (ULS) database indicate that the FCC has issued more than 50 licenses for antennas located on Trump Organization properties across the country, from the Trump National Golf Club in New Jersey to the Trump International Hotel in Washington, DC. These licenses seem to cover uses such as local radio systems for business purposes ("Industrial/Business Pool") to microwave TV broadcast translators ("TV Intercity Relay"). Please submit for the hearing record a complete list of all current and pending FCC licensing, regulatory, and other matters dealing with Trump Organization properties and President Trump-connected businesses.

Answer.—After a rigorous search, Commission staff have identified 29 licenses classified as Industrial/Business Radio Pool, which is used to support business operations, that appear responsive to your request. They are as follows: WQIN529, WQQY855, WQMZ782, WQYP438, WPPH436, WQTJ467, WQKM691, WQRA547, WQNT571, WQTH485, WQNC924, WQIG662, WQHT553, WQHP632, WQJA413, WQOU575, WQTG225, WQCR619, WQIS558, WQVW586, WQJP502, WQVK323, WQLA781, WQLI397, WQBF905, WPIX211, WPRL940, WQVW586, and WQSI465. Staff was unable to identify any pending applications that appeared responsive to your request.

Staff also found 42 active licenses held by individuals that either have the last name "Trump" or a last name including "Trump." However, none of these individuals appears to be President Donald J. Trump. Finally, we note that the above question references "TV Intercity Relay" service but our search for the name "Trump" did not result in any active licenses that are used for this service.

2. Will you inform this committee in writing of any new FCC licensing, regulatory, and other matter dealing with Trump Organization properties and President Trump-connected businesses that arises?

Answer.—Commission staff stands ready to repeat this search upon request, and I am happy to inform the Committee in writing of any such results.

3. Will you inform this committee in writing if President Trump or any member of the Trump Administration discusses any licensing, regulatory, or other matter before the FCC that concerns a Trump Organization property and President Trump-connected business?

Answer.—Yes.

4. Will you commit to ensuring that the FCC will continue to be a truly independent agency when it comes to licensing, regulatory, and other matters before the FCC that concern Trump Organization properties and President Trump-connected businesses?

Answer.—Yes.

5. The FCC regulates cable and wireless companies that have a poor reputation when it comes to customer service. So I was pleased when the FCC implemented a new consumer complaints database

system following a letter that Senator Nelson and I sent in 2014 to then Chairman Wheeler. The FCC's Consumer Complaint Data Center website is much more functional than the old complaints web page. How is the FCC using the data from this new tool to identify emerging consumer issues, analyze trends and inform FCC policymaking?

Answer.—The Consumer Complaint Data Center (CCDC) expands the data the Commission produces from a handful of charts and graphs to a comprehensive database of individual complaints filed at the Commission since 2015. The CCDC allows users to easily track, search, sort and download information. Consumers can build their own visualizations, charts and graphs. The data is also available via application programming interface, which allows developers to build applications, conduct analyses and perform research. The data can also be embedded on other websites. The CCDC includes visualizations of various communications issues profiled in the consumer complaints, as well as geographic search features by city, state and zip code. The Commission has used its enhanced data to inform both policy and consumer education. For example, the Commission recently issued several consumer robocalls advisories based in part on our data center's improved abilities. And third party developers of robocall blocking apps use the enhanced data to arm consumers with better tools to stop unwanted robocalls.

6. Your testimony makes clear that you want to reduce "regulatory burden" on corporations. Please describe what specific actions you have taken as a Commissioner to help protect consumers and what actions you plan to take to protect consumers now that you are Chairman?

Answer.—As FCC Commissioner, I have been an ardent supporter for the American consumer. For example, to ensure the safety and life of all Americans, I have voted to adopt rules to help first responders better locate wireless 911 callers. I have also voted to ensure that Americans with disabilities are not ignored by supporting actions to improve the closed-captioning of television so that hard of hearing consumers are afforded the same quality of life opportunities as non-hard of hearing consumers.

Since becoming Chairman, the Commission has "hit the ground running" and have acted on several pro-consumer initiatives. By establishing the Broadband Deployment Advisory Committee (BDAC), I have taken a crucial step to ensure that all Americans will have the opportunity to enjoy reliable, high-speed internet, by reducing regulatory barriers to infrastructure investment and streamlining processes. In late March, I also took steps to protect the American consumers from fraudulent, illegal, or spoofed robocalls. During this same time, I also issued improvements to the video relay services to better ensure that deaf and hard-of-hearing individuals experience service that is functionally equivalent to voice services available to hearing individuals. As Chairman, I remain committed to ensuring that the rules and policies of the FCC protect the interests of all Americans. And I look forward to taking further actions to close the digital divide, to protect consumers from unwanted and illegal robocalls, and ensure that disabled individuals have a full opportunity to participate in the 21st century economy.

7. You stated in a speech on First amendment issues last year that "our cultural consensus on the importance of being able to speak one's mind is eroding. And nowhere is that consensus more at risk than on college campuses." You further stated that "[e]lected officials should intervene to defend free speech when it is under attack at public universities" (Commissioner Pai's Remarks at Media Institute's 2016 Awards Banquet available at https://www.fcc.gov/document/commissioner-pais-remarks-media-institutes-2016-awards-banquet). President Trump seemed to threaten to withdraw federal funding from the University of California at Berkeley following its decision to cancel an event that featured a provocative speaker, Milo Yiannopoulos, who wrote for the far-right Breitbart News. Do you support withholding federal funds from universities like UC Berkeley for a matter like this?

Answer.—Federal funding for universities is not a matter within the FCC's jurisdiction. However, with over 20 million students currently attending school in an American post-secondary educational institution, it is a problem that liberty seems to find no refuge on the modern American campus. I believe that the cause of free speech has no partisan affiliation. Consider these words by Janet Napolitano, President of

the University of California system and former Obama and Clinton Administration official: "[W]e have moved from freedom of speech on campuses to freedom from speech. If it hurts, if it's controversial, if it articulates an extreme point of view, then speech has become the new bête noire of the academy." And I hope all administrators would heed the words of the University of Chicago's Committee on Free Expression, which states that "[I]t is not the proper role of the University to attempt to shield individuals from ideas and opinions they find unwelcome, disagreeable, or even deeply offensive. . . . [C]oncerns about civility and mutual respect can never be used as a justification for closing off discussion of ideas, however offensive or disagreeable those ideas may be to some members of our community."

8. My understanding is that the FCC issues radio and antenna licenses to universities. Will you exercise your authority as chairman of the FCC in an impartial manner when it comes to licensing, regulatory and other matters related to colleges and universities?

Answer.—Yes.

9. Section 254 of the Communications Act charges the Commission with ensuring that "Consumers in all regions of the Nation" have access to telecommunications and information services "that are reasonably comparable" to those in urban areas. The latest FCC data show that 96 percent of American in urban areas have access to fixed broadband. This compares to just 59 percent of those on tribal lands. Given this gap, has the FCC failed to live up to its duties under Section 254 of the Communications Act?

Answer.—Yes. I believe closing the digital divide should be the FCC's top priority, and nowhere does that hold more true than with respect to rural, remote, and Tribal areas. Unfortunately, the state of digital access on Tribal lands is far inferior to those on non-Tribal lands. This is not consistent with Section 254, and I'm committed to improving the situation now that I have the privilege of serving as Chairman.

10. Will you assure me that the FCC will prioritize tackling the digital divide in Indian country?

Answer.—Yes—closing the digital divide for all Americans, including those living in Indian country, is my top priority.

11. In 2010, then FCC Chairman Julius Genachowski stood up the Office of Native Affairs and Policy (ONAP). This tribal liaison office is vital for ensuring robust tribal consultation and better input from tribes on important FCC actions that impact them. So I am very disappointed that the FCC did not provide ONAP even the modest $300,000 in funding that Congress directed for tribal consultation in fiscal years 2015 and 2016. Will you assure me that FCC will not repeat this mistake for the current fiscal year?

Answer.—As head of the agency, I take my responsibility for Tribal consultation seriously, and I will ensure that the agency allocates the resources it needs to fulfill that engagement responsibility.

12. Does the federal hiring freeze impact the FCC's ability to fill any open positions within ONAP?

Answer.—The Commission is blessed with an excellent staff that has hit the ground running. I am not aware of any impacts of the hiring freeze thus far on the ability of the agency, including ONAP, to carry out its responsibilities.

13. The National Congress of the American Indian and others believe ONAP could be more effective if it were located within the Chairman's office rather than within an FCC bureau. Do you agree?

Answer.—The staff of the Office of Native Affairs and Policy are hardworking professionals who have effectively engaged with Native Nations, Tribal representatives, and others to provide the outreach and education needed to improve broadcast and broadband opportunities on Tribal lands. I look forward to continuing to work with the office, and always welcome recommendations for how the agency can be

more effective in its efforts. However, I generally do not support incorporating other offices into the Chairman's office.

14. The Mobility Fund II order and further notice issued by the FCC on March 7th announced up to $34 million per year for a Tribal Mobility Fund Phase II. Please provide the calculations undertaken by the FCC to reach a conclusion that $34 million per year will provide Tribal lands with access to services that are reasonably comparable in quality and price to those available in our nation's urban areas, as contemplated by Section 254 of the Communications Act.

Answer.—The budget for the Tribal Mobility Fund will be determined by applying the ratio of square miles in eligible Tribal Lands (adjusting for a terrain factor) to square miles of all eligible areas (adjusting for a terrain factor) to the total $4.53 billion budget for Mobility Fund Phase II. The preliminary estimate of $340 million for the Tribal Mobility Fund is based on analysis of current Form 477 data, which concluded that ratio is approximately 7%. Eligible areas for both Tribal and non-Tribal lands will be finalized after a comprehensive challenge process, at which point the ratio will be recalculated and applied to the total Mobility Fund Phase II budget. Notably, the Tribal Mobility Fund Phase II budget serves as a floor, not a ceiling, on the potential support in Tribal lands.

15. At a rate of $34 million in annual universal service investment, how long will it take to achieve reasonable comparability between tribal lands and urban areas for mobile broadband?

Answer.—The Tribal Mobility Fund Phase II envisions a ten-year term of support with a final buildout benchmark at the six-year mark, at which point a winning bidder must demonstrate reasonably comparable advanced mobile services in the support area.

16. What amount of annual universal support would be necessary to achieve reasonable comparability between tribal lands and urban areas for mobile broadband within five years?

Answer.—Shortening the buildout benchmark by one year would likely increase the amount of support demanded by competitors in the Mobility Fund Phase II and Tribal Mobility Fund Phase II, and likely reduce the total coverage of Indian country by participants in the auction. Because these auctions will rely on market forces to determine the specific funding required to serve any area, the precise impact of such a change is at this point in time unknowable.

17. In a September 2016 interview on the Sean Hannity Show, you spoke about concerns about the long-planned expiration of NTIA's Internet Assigned Numbers Authority (IANA) functions. You reportedly stated that, "[I]f you cherish free expression, and free speech rights generally, you should be worried, I think, when there's—this oversight role's going to be ceded to potentially, foreign governments who might not share our values" (see Hanchett, Ian. "FCC Commissioner on Internet Oversight Switch: 'If You Cherish Free Expression,' 'You Should Be Worried,' This Is 'Irreversible'." available at http://www.breitbart.com/video/2016/09/28/fcc-commissioner-on-internet-oversight-switch-if-you-cherish-free-expression-you-should-be-worried-this-is-irreversible/). This expiration occurred on October 1, 2016. Do you still have these concerns about the IANA transition?

Answer.—The previous model of Internet governance was a tremendous success. Under American stewardship, the Internet became an unprecedented platform for free expression, innovation, and democratization. In my view, those favoring a change had a burden of proof to show why such a momentous change would benefit Internet users. In any event, now that the transition has occurred, we must continue to be vigilant to ensure that the Internet is free from unwarranted government intrusion.

18. At a May 12, 2015 hearing of the Financial Services and General Government Subcommittee of the Committee on Appropriations, you testified that you "do not believe that funds for moving the FCC's headquarters… should be included within the FCC's general budget authority." You further stated that

"Congress should provide [FCC] with specific budget authority for this purpose." What specific budget authority will you seek from Congress for moving the FCC's headquarters?

Answer.—We received adequate funds in Fiscal Year 2016 to initiate the FCC's headquarters move and/or facilities restacking. We expect to receive the remaining funds in the final Fiscal Year 2017 appropriations bill. We have continued to work with GSA to ensure an orderly transition; however, there is an outstanding appeal from the initial U.S. Court of Federal Claims decision granting authority for moving our headquarters. Accordingly, we will continue to work with the Appropriations Committee to ensure that we have the appropriate level to handle this process and any related matters in the next year.

19. At a March 27, 2014 hearing of the Financial Services and General Government Subcommittee of the Committee on Appropriations, we discussed your idea of having an FCC "dashboard" to improve transparency and accountability. Do you plan to implement such a dashboard?

Answer.—Yes, I am still interested in implementing such a dashboard.

20. I am interested in learning your thoughts about how to craft spectrum policy that is "future proof." The United States Frequency Allocation Chart (available at https://www.ntia.doc.gov/files/ntia/publications/january_2016_spectrum_wall_chart.pdf) indicates that essentially all available spectrum has already been allocated. So the challenge today seems to be finding efficiencies and repurposing spectrum when new uses become important. How do we ensure that allocations made today do not unintentionally prevent us from meeting spectrum needs in the future?

Answer.—The spectrum allocation table is likely here to stay for the foreseeable future, but we have had incredible success enabling the various radio services the ability to innovate and deploy new technologies as they become available. Two examples stand out. The flexibility of our technical rules for commercial wireless spectrum have allowed the transition from the first through fourth and soon the fifth generation technologies without the need for continual FCC approvals. Similarly, Wi-Fi and Bluetooth were developed and deployed in successive generations due to the flexibility of our unlicensed rules.

I am committed to building on this foundation by identifying and eliminating any unnecessary rules that may stand in the way of innovation. One key to this process is encouraging the rapid deployment of innovative technologies and opening up previously underutilized spectrum bands for use. This can be accomplished through a variety of accelerated agency actions as well as nimble market-based approaches, such as a streamlined secondary market.

21. Astronomers from around the world use the Very Large Array (VLA) radio telescope located outside Socorro, New Mexico to make observations of stars, quasars, pulsars, and galaxies that are not possible with optical telescopes. Current law allocates certain radio frequencies for such scientific use and protects against harmful interference. This is critical for radio astronomers to be able to do their research. Do you agree that federal policy should continue to ensure that radio astronomers have access to spectrum needed for their research?

Answer.—Yes.

22. Unlicensed use of the TV "white spaces" spectrum has the potential to enable low cost fixed broadband connectivity in rural areas. My understanding is that proponents of using TV white spaces believe it is essential that there be adequate access to useable 6 MHz channels in every U.S. market. Will you commit to making this issue a priority as you finalize the remaining policy issues in the TV white space related proceedings and petitions for reconsideration?

Answer.—I am a strong believer in unlicensed use of spectrum, which has led to innovations such as Wi-Fi. I agree that unlicensed access is especially critical in rural markets, and I agree that the Commission must do what it can to ensure that the repacking of the TV bands does not foreclose wireless Internet

service providers and others from increasing broadband deployment in rural America through the use of white-space devices.

23. What steps will you take as FCC Chairman to create new opportunities for Tribal Nations to access spectrum?

Answer.—As stated above, one of my top priorities as Chairman is to close the digital divide, including on Tribal lands. I've proposed that we increase buildout obligations (in conjunction with extending license terms) in order to ensure that licensees build out on Tribal lands and other areas that don't have coverage. The Tribal Mobility Fund also will play an important part of ensuring Tribal areas have coverage. I have also announced the formation of the Broadband Deployment Advisory Committee to explore ways to accelerate deployment of high-speed broadband nationwide and close the digital divide.

24. Windstream declined almost $28 million in Connect America funding for rural broadband in New Mexico. Windstream and other companies will be able to bid in a "reverse auction" process to bring broadband service to these customers. When will this reverse auction take place?

Answer.—The Commission is working through the pre-auction process, with the expectation of conducting the CAF II auction in early 2018. Following the Commission's bipartisan vote on February 23, the auction will offer almost $2 billion to bidders to connect the unserved over the next decade. It incorporates rules to induce new entrants to participate—competitive entrants like wireless Internet service providers, small-town cable operators, and electric utilities. The CAF II auction order adopted auction weights designed to give every bidder—no matter what technology they use—a meaningful opportunity to compete for federal funds, while ensuring the best value for the American taxpayer. These weights account for the value of higher speeds, higher usage allowances, and low latency, but also balance these preferences against our objective of maximizing the effectiveness of finite USF funds to serve consumers in unserved areas.

25. I am very concerned that, even after a "reverse auction" process for Connect America funding for rural broadband in New Mexico, the most costly areas to deploy service will still be left behind. It seems to me that if FaceBook and Google can bring Internet service to developing countries, it should be within our means to make sure all New Mexicans have access to broadband. Could you share your thoughts on how the FCC could use pilot projects or encourage new technologies to bring broadband service to remote rural areas?

Answer.—While the Commission previously decided to include areas that are deemed to be extremely high-cost in the CAF II auction, it recognized that not all areas will receive bids. Therefore, the Commission has concluded that it will award support in a subsequent Remote Areas Fund competitive bidding process with respect to areas that, after the CAF II auction, remain unserved. The Commission's goal is to commence the Remote Areas Fund auction within a year of the close of the CAF II auction. Both the CAF II and the Remote Areas auctions are technology neutral, meaning providers using new technologies that can offer voice and the minimum level of broadband service are eligible to participate.

26. The federal agency overseeing broadband providers and Internet policy should be a flagship agency when it comes to using the best IT tools available. Yet when record numbers of Americans tried to submit comments on net neutrality, the FCC's electronic filing system crashed. How do you plan to prioritize the FCC's IT reform efforts moving forward?

Answer.—I am working with the Office of Managing Director to review all IT projects for the next Fiscal Year to determine the success/fail ratio of prior year projects. However, I believe that the Commission has made considerable progress since the system crash described by you, including appropriate upgrades and maintenance improvements. I look forward to working with our Office of Managing Director and our CIO to pinpoint the cause of past deficiencies and develop leadership tools to avoid system breakdowns.

Also, the FCC will work with OMB and Congress to ensure that we have adequate funds to prioritize essential projects going forward.

27. What are the most important FCC IT systems that need to be modernized?

Answer.—The FCC systems supporting Auctions (ISAS/ABS), Equipment Authorization (EAS/ELS), and Licensing (ULS/CDBS).

28. Describe the role of the FCC Chief Information Officer (CIO) in the development and oversight of the IT budget. How is the CIO involved in the decision to make an IT investment, determine its scope, oversee its contract, and oversee continued operation and maintenance?

Answer.—As you know, the Commission is a very small agency, with less than 1,600 FTEs and a relatively limited budget for IT projects. The FCC has a small permanent IT staff of 45 with approximately 275 contractors—although we have been increasing the staff-to-contractor ratio during the past few years. Accordingly, we do not have the structure or apparatus to support a large, independent office of Chief Information Officer (CIO) as some larger agencies have established. The CIO at the FCC oversees the IT budget process and reports directly to the Managing Director, who in turn reports directly to the Chairman's Chief of Staff.

The agency's Chief Financial Officer is on the same level as the CIO within the Office of Managing Director (OMD), and provides budgetary expertise to ensure that proposed projects are properly evaluated.

The CIO supervises staff within the office tasked with developing project concepts, and requests funds from the Managing Director in consultation with the CFO and procurement staff. The final decision on priority projects and funding is made by the Chairman's Chief of Staff with recommendations by the Managing Director. Once a project is approved and the procurement processed, the CIO has operational supervision over implementation and is responsible for programmatic results.

29. Describe the existing authorities, organizational structure, and reporting relationship of the Chief Information Officer.

Answer.—The CIO reports directly to the Managing Director, who reports directly to the Chairman's Chief of Staff. The CIO leads and oversees all IT programs, functions and proposals within the Commission. The CIO is responsible for the supervision of 45 FTEs and 275 contractors. The IT team's resources are organized under two deputy CIOs. The CIO coordinates programmatic financial analysis with the CFO, who is on the same level within the Office of Managing Director.

30. According to the Office of Personnel Management, 46 percent of the more than 80,000 Federal IT workers are 50 years of age or older, and more than 10 percent are 60 or older. Just four percent of the Federal IT workforce is under 30 years of age. Does the FCC have such demographic imbalances? How is it addressing them?

Answer.—The FCC does not consider age to be an impediment to a successful workforce. We strive to maintain a balance of more experienced employees to serve as supervisors and mentors for less experienced employees, and we hire for positions based on specific, demonstrated agency needs.

31. How much of the FCC's budget goes to Demonstration, Modernization, and Enhancement of IT systems as opposed to supporting existing and ongoing programs and infrastructure? How has this changed in the last five years?

Answer.—The FCC has steadily reduced Operations and Maintenance (O&M) spending and has increased investment in Demonstration, Modernization, and Enhancement (DM&E). The five-year historical reporting is as follows:

- FY14 – 86% O&M, 14% DM&E
- FY15 – 73% O&M, 27% DM&E
- FY16 – 48% O&M, 52% DM&E
- FY17 – 49% O&M, 51% DM&E
- FY18 – 49% O&M, 51% DM&E (projected)

32. What are the 10 highest priority IT investment projects that are under development at the FCC? Of these, which ones are being developed using an "agile" or incremental approach, such as delivering working functionality in smaller increments and completing initial deployment to end-users in short, six-month time frames?

Answer.—Although we are currently reviewing all management practices within the FCC, I have been advised that all FCC IT efforts have been delivered under an "agile" process, emphasizing short sprints of three weeks or less. The IT staff, under the direction of OMD, uses an "adapt first, purchase second, develop last" methodology to reduce cost and complexity in modernization efforts. According to the CIO, solutions are ideally adapted or reused from existing capabilities; purchased off-the-shelf; and otherwise developed, when not readily available. The 10 highest priority efforts are as follows:

1. Mobility Fund 2
2. Connect America Phase II
3. Reimbursement Fund Administration System
4. Integrated Spectrum Auction System AM Revitalization
5. Incentive Auction Form 399 Modernization
6. SaaS Platform Migration/ULS 2.0
7. Universal Licensing System Forms 603 & 608
8. Universal Licensing System 700 MHz
9. Cybersecurity Enhancements and Modernization/Identify Management/Single Sign-On
10. Windows 10/Office 2016 Migration

33. What are the 10 oldest IT systems or infrastructures in your department and how old are they? Would it be cost-effective to replace them with newer IT investments?

Answer.—The Office of Managing Director has provided the following list of legacy systems and needed actions:

1. Equipment Authorization System, launched 1998, hardware most recently upgraded at least 6 years ago, needs to be moved from commercial service provider currently hosting it to a public cloud.
2. Experimental Licensing System, launched 1998, hardware most recently upgraded at least 6 years ago, needs to be moved from commercial service provider currently hosting it to a public cloud.
3. International Bureau Filing System, launched 1998, hardware most recently upgraded at least 6 years ago, needs to be moved from commercial service provider currently hosting it to a public cloud.
4. Universal Licensing System, launched 2004, hardware most recently upgraded at least 6 years ago, needs to be moved from commercial service provider currently hosting it to a public cloud.

5. Legacy Server Infrastructure, launched 2005, most recently upgraded at least 6 years ago will be eliminated by cloud migration
6. Integrated Spectrum Auction System, launched 2005, hardware most recently upgraded at least 6 years ago, needs to be moved from commercial service provider currently hosting it to a public cloud.
7. Consolidated Database System, launched 2007, hardware most recently upgraded at least 6 years ago, needs to be moved from commercial service provider currently hosting it to a public cloud.
8. Canadian Co-Channel Serial Coordination System, launched 2008, hardware most recently upgraded at least 6 years ago, needs to be moved from commercial service provider currently hosting it to a public cloud.
9. Broadband Map, launched 2009, hardware most recently upgraded at least 6 years ago, needs to be moved from commercial service provider currently hosting it to a public cloud.
10. Enforcement Bureau Activity Tracking System, launched 2011, hardware most recently upgraded at least 6 years ago, needs to be moved from commercial service provider currently hosting it to a public cloud.

The dates above reflect the year the application was originally designed and launched. The software components are continuously updated.

34. How does FCC's IT governance process allow for FCC to terminate or "off ramp" IT investments that are critically over budget, over schedule, or failing to meet performance goals? Similarly, how does FCC's IT governance process allow for your department to replace or "on-ramp" new solutions after terminating a failing IT investment?

Answer.—The Managing Director has advised me that the CIO's senior management team uses a robust governance process that provides a consistent and results-focused investment review. On a weekly basis, the managers review projects for roadblocks and risks. On a monthly basis, they review all active projects and provide an internal Information Technology Review (ITR).

The staff examines projects showing risk in cost, schedule, or performance to determine viability and return on investment. When they determine that projects are in a "failure status," they realign and resources immediately to prioritize ongoing and future corrective efforts, including replacement of the failed project. Performance within a 10% variance of cost and schedule are considered healthy. Replacement solutions are evaluated on an individual basis, with customer engagement and risk factors considered before resources are assigned.

As a small, non-CFO Act agency with limited budgetary resources for IT projects, the entire spending on IT during the past year was approximately $78 million. The FCC has a small permanent IT staff of 45 with approximately 275 contractors – although we have been increasing the staff to contractor ratio during the past few years. The use of permanent, highly qualified FTEs to evaluate projects has helped with the quality control process and enhanced our ability to move forward with the most cost-effective IT projects.

35. What IT projects has FCC decommissioned in the last year? What are FCC's plans to decommission IT projects this year?

Answer. —

- Consumer Complaint Management System (Legacy) - decommissioned
- Broadcast Public Inspection File – decommissioned

- Broadband Map Infrastructure (Legacy) – decommissioned
- VIZMO Broadband Reporting – decommissioned
- FCC.gov Internet Service (Legacy) - decommissioned
- FCC Email Infrastructure (Legacy) – decommissioned
- Network Outage Reporting System (Legacy) - decommissioned
- SharePoint On-Premises Infrastructure - scheduled for decommissioning
- BMC Remedy Auctions Hotline - scheduled for decommissioning
- Legacy Cybersecurity Tools (5+ systems) - scheduled for decommissioning
- ISAS Legacy Components - scheduled for decommissioning
- Electronic Comments Filing System (Legacy) – scheduled to be decommissioned

36. Please describe FCC's efforts to identify and reduce wasteful, low-value or duplicative information technology (IT) investments as part of these portfolio reviews.

Answer.—The Commission has established an internal Technology Review Board (TRB) for this purpose. On a monthly basis, the TRB reviews the Technology Reference Model, which includes all of the approved technology applications within the FCC, and carries out thorough quarterly reviews to ensure the technology portfolio is optimized for the Commission. All new proposals are evaluated against existing services and ideally matched with current services when possible. By using established Software-as-a-Service (SaaS) and Platform-as-a-Service (PaaS) capabilities, which provide the foundations of the modernized applications and systems being rolled out to the Commission and the public, we have reduced complexity and achieved cost reductions.

37. In 2011, the Office of Management and Budget (OMB) issued a "Cloud First" policy that required agency Chief Information Officers to implement a cloud-based service whenever there was a secure, reliable, and cost-effective option. How many of the FCC's IT investments are cloud-based services (Infrastructure as a Service, Platform as a Service, Software as a Service, etc.)? What percentage of the department's overall IT investments are cloud-based services? Does FCC have a Cloud strategy to encourage the use of Cloud computing solutions? If not, by when do you plan to have such a strategy in place?

Answer.—The FCC IT Strategic Plan details the Commission's commitment to cloud sourcing as follows:

"We will leverage cloud service offerings to the fullest extent possible, ensuring the service provider meets all government requirements for security, privacy, and reliability. The FCC will leverage commercial solutions that drive improved performance, security, and availability. By leveraging managed security solutions and partnerships with the commercial market, the FCC is able to reduce costs and improve security by capitalizing on the economies of scale through a managed security provider."

As a result, almost all of our IT investments are cloud-based services. All of the remaining infrastructure was transferred to a commercial service provider in 2015, with a small remaining contingent of FCC-owned infrastructure at the Commission's COOP site. The FCC uses a combination of IaaS, PaaS, and SaaS across the breadth of the IT services it provides. All new applications are configured using SaaS or PaaS solutions, whichever best fits the business requirements. Applications developed using IaaS foundational solutions are situational and are only applicable if SaaS or PaaS solutions do not meet the business requirements. No new applications are considered for development and deployment to on-premises infrastructure or systems.

38. Congress passed the MEGABYTE Act (PL 114-210) to encourage agencies to achieve significant savings in managing IT assets including software licenses. What policies or processes are in place at FCC to improve software management?

Answer.—The FCC takes advantage of blanket purchasing agreements, volume licensing models, consumption based cloud services, and variable cost models for cloud computing as part of the process to reduce licensing and hardware/software costs. The Senior Procurement Executive, in coordination with the Chief Information Officer, has published a policy memorandum on how the FCC will gain efficiencies under the MEGABYTE Act. Additionally, the specific guidance addresses responsibility after the purchase by specifying "This shall include a complete inventory of software licenses and maintenance of a mechanism to track, maintain, and analyze software use."

39. Provide short summaries of three recent IT program successes – projects that were delivered on time, within budget, and delivered the promised functionality and benefits to the end user. How does FCC define "success" in IT program management? What "best practices" have emerged and been adopted from these recent IT program successes? What have proven to be the most significant barriers encountered to more common or frequent IT program successes?

Answer.—A review of the Commission's most recent spending shows an emphasis on IT. I plan to continue this trend while also ensuring that it is accomplished using business practices that are results-oriented. Success is only achieved when the customer can speak directly to the value of the IT team's work. To deliver these results, OMD's IT staff has partnered with Bureaus and Offices to define project success prior to initiating a project, and continually reviews progress and performance to ensure goals are met. Below are three recent IT program successes cited by OMD:

- FCC Consumer Helpdesk. FCC IT delivered a cloud-based consumer helpdesk solution, but instead of the $3.2 million quote to internally build a new system over two years, FCC spent $450,000 for a system that was ready to go in six months. Additionally, the new solution has annual operations costs of $100,000 a year instead of an estimated $640,000 to maintain an on-premise system with FCC contract staff and government-owned equipment and software.
- Office365 and Virtual Desktop Infrastructure. The FCC IT team completed a 100% migration of the Commission staff to a Microsoft Office365 cloud environment in August of 2015. The Commission now has a virtual desktop infrastructure in place that supports remote computing for nearly the entire staff. In addition to improving accessibility and remote capabilities, these improvements delivered a robust platform for information sharing and collaboration, and eliminated nearly a dozen legacy servers.
- FCC.gov Modernization. FCC IT conducted a complete overhaul of FCC.gov. Work included upgrading the web content management system, upgrading the design to be mobile-friendly and modern-looking, as well as completely redoing the information architecture to improve site navigation. All of these efforts were informed by extensive user research with internal and external stakeholders. The FCC.gov site search was also replaced with a federated application that indexes FCC.gov and EDOCS content.

Questions for the Record for FCC Chairman Ajit Pai
Senate Commerce Committee Hearing on "FCC Oversight"

Question 1. Connected and automated vehicles have the potential to greatly improve safety, reduce energy consumption, and enhance mobility. Dedicated Short Range Communications (DSRC) technology allows our vehicle fleet to communicate seamlessly, improving our transportation system, and offers vehicles a wireless sensor capable of providing 360 degree awareness to support vehicle safety and automated driving. Vehicle-to-vehicle technology, which utilizes DSRC, requires secure and reliable communications without harmful interference or delay. Safety messages sent to warn drivers must be sent without interruption – even fractions of a second matter with automotive safety. DSRC, operating in the 5.9 band, has been proven to deliver that fraction of a second communication, and can save lives now.

Over 35,000 Americans died on our roads last year. As the Federal Communications Commission continues to study whether the band can be shared, we must not lose sight of the critical safety benefits DSRC can bring.

We need clear federal leadership to ensure that we have a uniform vehicle safety policy that promotes innovation and leads to the responsible deployment of the connected and automated vehicles. The Commission has been updating and refreshing the record since summer 2016 in the 5GHz band specifically looking at the viability of potential sharing solutions between high-power WiFi and DSRC operations. It is also my understanding that you have looked at several prototypes to see if sharing in the band can work.

a) Do you support vehicle-to-vehicle and vehicle-to-infrastructure communications? If yes, why? If no, why?

   Answer.—I support safety enhancements for vehicles. Indeed, I had a chance to learn about some of the technological development in this area during a recent visit to General Motors in Detroit. Going forward, I believe it is important to have a data-driven, objective process for evaluating spectrum use and interference issues.

b) Do you agree with the National Highway and Traffic Safety's assessment of vehicle-to-vehicle and vehicle-to-infrastructure communications that these technologies have the potential to mitigate or eliminate up over 80% of non-impaired crashes?

   Answer.—Our agency's expertise relates to the engineering components of the proposal and whether commercial spectrum can be shared without harmful interference. I cannot say, based on my own independent judgment, whether NHTSA's assessment is correct.

c) With the conclusion of the US Department of Transportation's Smart City Challenge, and municipalities around the country already developing and deploying vehicle to infrastructure communications, do you agree that it is especially important to ensure that the 5.9 GHz band and DSRC services remain clear from harmful interference?

   Answer.—Our objective with respect to our examination of potential spectrum sharing between unlicensed devices and DSRC is to prevent harmful interference. We intend to work with the relevant stakeholders to develop engineering solutions that support this goal.

d) Please provide an overall update on the status of the 5.9 GHz interference testing.

   i. Please provide a description of the prototypes received to date and the results of any initial testing, including results on co-channel and cross-channel interference.

      Answer.—We have received nine devices to date – two each, including an access point and client device, from KEA Technologies, Cisco, Qualcomm, and Broadcom, and a roadside reflector from CAV Technologies. These devices are all designed to

work with the current 5.9 GHz band plan to evaluate the proposed detect and vacate sharing scheme. We also are anticipating another device from Broadcom in early April that is designed to operate on a modified 5.9 GHz band plan to evaluate the proposed rechannelization sharing scheme.

The ongoing Phase I testing consists of three components: RF characterization, benchtop interference testing, and investigation of interference mitigation. Most of the tests have been completed. The data generated during the tests is currently being analyzed.

ii. Please explain how the FCC is working with the Department of Transportation and the National Telecommunications and Information Administration (NTIA) as they examine sharing around this life-saving technology.

Answer.—The Department of Transportation and the NTIA have been our partners throughout the testing process. Each organization provided input to develop the test plan. The Department of Transportation also helped secure some DSRC devices for testing.

iii. What is the FCC's target date for completion of Phase 1 of testing?

Answer.—We just recently received the device that will allow us to fully evaluate the re-channelization sharing scheme. We are currently evaluating it under the same process as the previous devices we examined.

I have been advised by our Office of Engineering and Technology that based on their experience with those devices, they anticipate that it will take four to six weeks to complete testing and analyze the data. I understand that because this device functions differently from the previous devices tested, there may be additional tests that we need to conduct to fully understand how it may interact with DSRC devices.

iv. What is the FCC's target date for completion of Phase 2 and Phase 3 of testing?

Answer.—Phases 2 and 3 will require additional input and resources from the Department of Transportation and NTIA. More specifically, because those phases include installing and testing devices on actual vehicles in motion, they will need to be conducted on test ranges and under real world conditions. We will have a better idea of the timing once we complete the Phase 1 testing, and will work with our partners at DoT and NTIA to finalize the additional test plans.

v. Will you include industry stakeholders in Phase 2 and Phase 3 testing to ensure a complete understanding before making any decisions, given their more than a decade of development, availability of equipment and understanding of vehicle-to-vehicle applications?

Answer.—The Commission's staff met with the industry stakeholders to discuss the test plan prior to its finalization and subsequently to discuss some of our early test results. I understand that plans are underway to meet the parties again to review Phase 1 results and plan for Phases 2 and 3. Additionally, any rule changes the Commission may consider are subject to public comment, so industry stakeholders will have ample opportunity to weigh-in prior to any final decision.

e) Will you commit to making public all of the data collected by the FCC during the bench and field testing phases?

Answer.—The Commission will make all non-proprietary or non-confidential data available to the public.

f) What is the Commission's target date for making a final determination on spectrum sharing in the 5.9 GHz band with unlicensed devices?

Answer.—The Commission's staff is working to make a decision as expeditiously as possible. Because the testing is ongoing, it is difficult to set a date for final determination at this time.

g) If proven that the "re-channelization" proposal will cause harmful interference to DSRC services within the 5.9 GHz band, will you still move forward with allowing for unlicensed Wi-Fi to share that band of spectrum? If yes, why?

Answer.—Under our rules, unlicensed devices may not cause harmful interference. Any rules the Commission were to adopt would be designed to ensure that DSRC devices do not receive harmful interference from unlicensed devices.

h) If both the "detect and vacate" and "re-channelization" proposals are proven to cause harmful interference to DSRC services will you continue the status quo and allow DSRC to operate in the 5.9 GHz band on their own without sharing the spectrum? If not, why?

Answer.—I cannot commit to any course of action without having a full, concrete set of facts. And the Commission has not proposed to change the DSRC rules.

i) It is critical that the FCC evaluate the sharing proposals based on facts, not opinions. Subjective judgements about what will or will not work are no substitute for solid engineering data, which has undergone rigorous and open review. Will you commit that the FCC's final determination on spectrum sharing in the 5.9 GHz band will be based on sound engineering data, which has undergone rigorous and open review?

Answer.—Yes. We will comply with the Administrative Procedure Act and our own rules as we move forward with this matter. Accordingly, industry stakeholders will have an opportunity to review the engineering data and weigh-in prior to any final decision by the Commission.

Question 2. On March 1, 2017, the Senate Commerce Committee held a hearing entitled, "Connecting America: Improving Access to Infrastructure for Communities Across the Country" to examine the challenge of connecting Americans, particularly in rural areas, to transportation and information networks. The Committee heard from several witnesses about how DSRC technology has improved traffic congestion and reduced pedestrian accidents in their communities. The witnesses also stressed the need to preserve the use of the 5.9 GHz spectrum for DSRC safety critical applications. Many states, including my own, have a real interest in the benefits that connected cars and autonomous vehicles can bring to our communities. NHTSA has released a draft regulation that would require DSRC on 50% of all new vehicles by 2021 model year and GM is already selling cars that are equipped with DSRC services. There are DSRC deployments in several states underway, including a "SPAT-challenge" to deploy DSRC-equipped intersections that would broadcast signal phase and timing in corridors in all 50 states by 2020.

a) Are we moving in a direction where we will see this technology and spectrum used for the lifesaving applications as it was intended – or are we running the risk of these investments being wasted due to spectrum interference?

Answer.—The Commission has a responsibility to accommodate the introduction and growth of new radio communications services and technologies while also considering whether there may be any adverse impact to incumbent radio services. Our staff has always seriously considered any such evaluations and focus on potential risks of harmful interference to safety-based services or applications, and I intend for that to continue under my Chairmanship.

Senate Committee on Commerce, Science and Transportation
Oversight of the Federal Communications Commission
March 8, 2017

Senator Tammy Duckworth
Questions for the Record

[To Chairman Pai and Commissioner Clyburn]

Video Visitation

As Commissioner Clyburn noted in her testimony, I authored the *Video Visitation in Prisons Act* last Congress to increase oversight of telecommunications in prisons and permit prisoners who demonstrate good behavior to stay in touch with their family through video conferencing. Because the vast majority of prisoners will eventually be released, it is not a matter of if we need to prepare these individuals to rejoin society, but rather, a matter of how well we do it. And the FCC has a critical role to play in this important national challenge. Across the country, jails and prisons have begun implementing a new way for families and friends to stay in touch with their incarcerated loved ones: *video conferencing.*

In Illinois, remote video conferences have provided the only way for some families to stay in touch, one example is the Menard Correctional Center, which is more than 300 miles from Chicago, where many of its prisoners come from and still have family who live there.

Studies show that prisoners who remain in close contact with family members achieve better post-release outcomes and lower rates of recidivism. Yet, too often, prisoners and their families struggle to maintain regular contact, whether through in-person visits, calls or "video visitation."

Question 1. Would you agree that the prison video visitation service industry remains a largely unregulated area of commerce, which has led to low-quality service paired with exorbitant, cost-prohibitive fees that prisoners and their families cannot afford?

Answer.—Video visitation is an emerging service in the ICS market. At this point, we are still learning about the potential, positive role this service can play. The Commission has adopted annual reporting requirements and will be collecting data from ICS providers regarding their services, including video visitation. The providers' reports will offer us further insight into video visitation services and pricing. Generally speaking, I've long believed, as I publicly stated in 2013, that with respect to this market "we cannot necessarily count on market competition to keep prices for inmate calling services just and reasonable."

Question 2. As technology changes and more prisons start using video conferencing, what are some of your recommendations for the future of this technology?

Answer.—Video conferencing offers some very valuable opportunities for inmates' families to stay connected. We are hopeful that this emerging service will continue to evolve in a manner consistent with the needs of inmates and their families.

Question 3. Why is it important that video visitation supplement – not supplant—in-person visitation?

Answer.—Family support plays an important role in helping released prisoners reenter society and in reducing recidivism. In-person visitation has historically been an important component to ensuring that

inmates stay connected with their families and maintain a sense of well-being prior to their re-entry into society.

[To Chairman Pai]

Life Line

Chairman Pai, one of your first actions was to direct the Wireline Competition Bureau to overturn an order designating nine wireless companies to provide Lifeline Broadband service through the USF Lifeline program, which provides support to low-income households in order to gain phone and broadband access.

One of the wireless companies that lost its Lifeline designation was Applied Research (AR) Designs, a certified Minority Business Enterprise and African-American owned company in Chicago. AR Designs applied for a first-time designation with the FCC as a Lifeline Broadband Provider with streamlined consideration and was approved on January 18, 2017.

But last month, you revoked their designation based on concerns about "waste, fraud and abuse" and now will be limited in providing affordable Lifeline-supported broadband service to Chicago's low-income, underserved communities.

This program would allow access for schoolchildren to complete homework assignments and parents who are unemployed, to seek employment and economic development. The designation would also benefit Veterans and seniors, who are on fixed incomes and cannot otherwise, afford higher priced plans. Non-eligible Lifeline customers would be offered the same plan at a fixed price of $9.25.

Question 1. Revoking these Lifeline designations, with immediate action to address the loss of access to affordable broadband service, harms my constituents residing in low-income and underserved Chicago communities.

- Please provide a detailed explanation as to why you revoked designations for AR Designs and the other firms;

  Answer.—As the Wireline Competition Bureau explained in its *Order on Reconsideration,* giving the agency additional time to review these designations "would promote program integrity by providing the Bureau with additional time to consider measures that might be necessary to prevent further waste, fraud, and abuse in the Lifeline program" because "[p]otential waste, fraud, and abuse through the use of the independent economic household worksheet, identity verification dispute resolution processes, address verification, and discrepancies between reimbursement requests and subscriber listings in the National Lifeline Accountability Database (NLAD) raise concerns that the [designations] fail[ed] to resolve." In addition, the Bureau agreed with the National Tribal Telecommunications Association the "certain providers seeking designation as an LBP failed to fulfill their obligations under section 54.202(c) of the Commission's rules" and that the "designation [of] FreedomPop and KonaTel prior to the 30-day public comment period deadline represents a clear and obvious error." Finally, the law here is clear: Congress gave state governments, not the FCC, the primary responsibility for approving which companies can participate in the Lifeline program under Section 214 of the Communications Act. This is how the program worked over two decades, over three Administrations, and over eight Chairmanships. By letting states take the lead on certification as envisioned by Congress, we will strengthen the Lifeline program and put the implementation of last year's order on a solid legal footing. This will benefit all Americans, including those participating in the program.

- Please provide a justification as to why you did not have the full Commission vote on these revocations; and

  Answer.—In the *Lifeline Modernization Order*, the Commission delegated authority to the Wireline Competition Bureau to act on Lifeline Broadband Provider (LBP) designations. Just as the prior Administration used this delegated authority to direct the Bureau to designate these providers, the current Bureau relied upon that authority in returning these LBP applications to the queue.

- Please attach to your response all materials that the FCC relied on to make the determination to revoke these designations.

  Answer.—

  - *Total Call Mobile, Inc.*, Order, 31 FCC Rcd 13204 (EB 2016).
  - Testimony of FCC Commissioner Ajit Pai Before the Subcommittee on Communications and Technology of the United States House of Representatives Committee on Energy and Commerce, Oversight of the Federal Communications Commission, at 4-5 (July 12, 2016), *available at* https://www.fcc.gov/document/commissioner-pai-statement-house-oversight-hearing (Pai Testimony).
  - Petition for Reconsideration of National Tribal Telecommunications Association of the Lifeline Broadband Designation Order, WC Docket No. 09-197, et al. (filed Jan. 3, 2017)
  - Response and Opposition of Boomerang Wireless, LLC DBA enTouch Wireless to the Petition for Reconsideration of National Tribal Telecommunications Association, WC Docket No. 09-197, et al. (filed Jan. 19, 2017).
  - Response and Opposition of KonaTel, Inc. to the Petition for Reconsideration of National Tribal Telecommunications Association, WC Docket No. 09-197, et al. (filed Jan. 19, 2017).
  - Response and Opposition of STS Media, Inc. DBA FreedomPop to the Petition for Reconsideration of National Tribal Telecommunications Association, WC Docket No. 09-197, et al. (filed Jan. 19, 2017).
  - 47 CFR § 54.202(c).

Question 2. Will you commit to an on-time implementation of the Lifeline Modernization Order's third-party eligibility verifier, which will provide an additional layer of safeguards against any waste, fraud and abuse? In addition, please provide a detailed implementation status update.

Answer.—USAC, overseen by Commission staff, continues to work on a National Verifier that will create a more effective, efficient, and fiscally responsible program by having USAC take responsibility for determining subscriber eligibility. I am confident that the launch of the National Verifier will help root out waste, fraud, and abuse in the program. USAC, the FCC staff, states, and numerous other interested parties have made progress on designing and implementing the National Verifier in order to meet the timing commitments made by the Commission last year.

Senator Catherine Cortez Masto
Question for the Record
Committee on Commerce, Science, and Transportation
Hearing on "FCC Oversight"

For Chairman Pai:

Question 1. As we discussed during the hearing, I am concerned about barriers to the siting of telecommunications equipment on federal and tribal lands, like under the Bureau of Land Management.

- Can you please explain in writing specifically what we can do to address these challenges?

  Answer.—As part of the recently formed Broadband Deployment Advisory Committee, one of the initial working groups announced this week will tackle the issue of deployment on federal and tribal lands. In particular, the *Streamlining Federal Siting* working group will examine challenges related to siting on these lands and will provide recommendations on how to reduce or eliminate these barriers. In addition to members from the private sector and state and local governments, I plan to invite federal representatives from key agencies, such as the Department of Interior, to participate.

- And during our interaction, you said "absolutely" in response to my request that you commit to establishing an interagency working group of federal partners to tackle these siting challenges. Please confirm this commitment and let me know what I can do to help expedite this effort.

  Answer.—I am committed to working with federal partners to tackle siting issues on federal lands in order to facilitate infrastructure deployment.

- I am aware of an Interagency Broadband Working Group that currently exists, but that does not appear to have solved some hold up in get infrastructure sited in Nevada. Please inform me what you can commit to do to solve this challenge through a new or existing effort across federal agencies, including the U.S. Department of Interior, the U.S. Army Corps of Engineers, and the U.S. General Services Administration.

  Answer.—The FCC will continue to work with other federal agencies to tackle infrastructure deployment issues such as siting on federal and Tribal lands. The BDAC will be a forum for formulating an action plan to solve these issues.

Question 2. During the hearing I raised concerns regarding the proper staffing of the FCC and you said you needed to check and respond after the hearing, so here are my questions again for your detailed response:

- From your perspective, what impacts have you seen, or felt, from the White House's misguided blanket hiring freeze?

  Answer.— So far, the impact of the hiring freeze has been minimal. During this 90-day pause in hiring, we are prioritizing agency staffing needs in consideration of long-term workforce plans. We have been able to temporarily reallocate internal resources to meet mission-critical needs. In the event matters involving national security or public safety responsibilities require us to hire from outside the agency before the freeze ends, we will seek an exemption as provided under the executive order.

- How many openings would you estimate you have to fill at the Commission currently?

  Answer.—We are currently in the process of figuring out how many openings we will need to fill once the hiring freeze is over. I do not have an estimate of that number at this time.

- Can you assure me that merger reviews or legal challenges aren't being impacted by the need to hire staff?

  Answer.—Yes.

- Can you assure me that the hiring freeze will not have any negative impact on the conclusion and transition of the incentive auction?

  Answer.—Yes.

- And are there positions that are vacant and need to be filled at the FCC Office of Inspector General?

  Answer.— The Office of Inspector General currently has six vacancies. The hiring of one GS-15 Program Analyst, a reemployed annuitant, has been delayed due to the freeze. While initially delayed by the freeze, OIG is in the process of hiring a writer-editor, two Auditors and two Management and Program Analysts. The freeze will likely be over before these recruitment actions are finalized.

Question 3. I have reviewed the Equal Employment Opportunity Commission's (EEOC) 2016 report on "Diversity in High Tech," and it contains some frustrating and concerning observations regarding minority and female employment and leadership representation.

Namely:

- "Compared to overall private industry, the high tech sector employed a smaller share of African Americans (14.4 percent to 7.4 percent), Hispanics (13.9 percent to 8 percent), and women (48 percent to 36 percent)."
- "Of those in the Executives category in high tech, about 80 percent are men and 20 percent are women. Within the overall private sector, 71 percent of Executive positions are men and about 29 percent are women."
- 2014 data of the labor force participation rate at select leading "Silicon Valley tech firms," with similarly upsetting trends: "Among Executives, 1.6 percent were Hispanic and less than 1 percent were African American."

As Chairman, and an appointee seeking reconfirmation from the Senate, what is your plan to establish a more inviting sector to diversity of staff and leadership?

Answer.—While the FCC has equal employment opportunity rules that apply to broadcasters and cable operators, we do not have the statutory authority to impose such rules on Silicon Valley tech firms. I do, however, believe that the FCC should seek to lead by example in the area of diversity. I am proud, for example, to be the first Asian-American to lead the Commission. And I would also note that the majority of Bureau Chiefs at the FCC are currently women.

DISSENTING STATEMENT OF COMMISSIONER AJIT PAI

Re: *2014 Quadrennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996*, MB Docket No. 14-50; *2010 Quadrennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996*, MB Docket No. 09-182; *Promoting Diversification of Ownership in the Broadcasting Services*, MB Docket No. 07-294; *Rules and Policies Concerning Attribution of Joint Sales Agreements in Local Television Markets*, MB Docket No. 04-256.

"The more things change, the more they stay the same." When French journalist Jean-Baptiste Alphonse Kerr first expressed that sentiment 167 years ago, he obviously didn't have the FCC's media ownership regulations in mind. But his words ring true as the Commission finally gets around to finishing the 2010 Quadrennial Review.

Congress instructed the FCC to reassess its media ownership regulations every four years. It also provided that the agency "shall" get rid of outdated rules.[1] This was because Congress recognized that regulations designed to promote localism, diversity, competition, and investment in media could have exactly the opposite effect if they didn't keep up with the times.

But here, the FCC has failed on both counts. In terms of timing, the Commission has thumbed its nose at Congress for the past eight-and-a-half years by refusing to complete a single quadrennial review. This is the regulatory equivalent of completing your figure-skating routine for the 2010 Vancouver Winter Olympics after the Olympic flame has been extinguished at the closing ceremony of the 2016 Games in Rio de Janeiro. What took us so long? Based on the "substance" of this *Order*, I have no idea, for the agency essentially does nothing but stick its head in the sand.

The changes to the media marketplace since the FCC adopted the Newspaper-Broadcast Cross-Ownership Rule in 1975 have been revolutionary. Over the last four decades, newspaper circulation and advertising revenue have plummeted, and hundreds of publications have gone out of business. The Internet has become the go-to source for news. National and regional cable news networks have flourished. The days of Americans waiting for the morning newspaper to learn about what is going on around them are long gone. Yet, instead of repealing the Newspaper-Broadcast Cross-Ownership Rule to account for the massive changes in how Americans receive news and information, we cling to it.

And over the near-decade since the FCC last finished a "quadrennial" review, the video marketplace has transformed dramatically. Especially with the rise of over-the-top video, the market is now more competitive than ever. Never before have Americans been able to choose from such a wide array of content. They now demand to view that content when they want and on the device of their choice. And high-profile news is increasingly made and distributed on online video networks that didn't

[1] *Compare* Telecommunications Act § 202(h) (FCC "shall" review media ownership rules on quadrennial basis, "shall determine whether any of such rules are necessary in the public interest," and "shall repeal or modify" any unnecessary regulations) *with* Letter from Tom Wheeler, Chairman, FCC, to the Honorable Anna Eshoo, U.S. House of Representatives (Mar. 18, 2016) ("Section 629 of the Communications Act is explicit: The Commission *shall* . . . adopt regulations to assure the commercial availability [of set-top boxes]."), *available at* http://go.usa.gov/xDjbA; Statement of Chairman Tom Wheeler, August 2016 Open Meeting Press Conference at 1:03:08, http://go.usa.gov/xDjbJ ("Make no mistake, we *will* obey the law. The law [section 629] says, 'the Commission *shall*' provide for competitive choice [in navigation devices]. We *will* obey the law.").

even exist just a few years ago.[2] Yet, instead of loosening the Local Television Ownership Rule to account for the increasing competition to broadcast television stations, we actually tighten that regulation.

And instead of updating the Local Radio Ownership Rule, the Radio-Television Cross-Ownership Rule, and the Dual Network Rule, we merely rubber-stamp them.

The more the media marketplace changes, the more the FCC's media regulations stay the same.

This ostrich of an *Order* is not at all what Congress envisioned. And it is a thumb in the eye of the United States Court of Appeals for the Third Circuit, too. Five years ago, the Third Circuit vacated the FCC's definition of "eligible entity."[3] Earlier this year, the Third Circuit said "enough is enough"[4] and demanded that the FCC take prompt action on its "stalled efforts to promote diversity in the broadcast industry."[5] So what does the Commission do here in response to the court? Precisely one thing: It re-adopts the *exact same* "eligible entity" definition that the Third Circuit rejected in 2011!

This proceeding is proof of this agency's plenary and purposeful abdication of its statutory duty. It shows that this Commission that does not believe it is accountable to Congress or the courts. And it is evidence that unless Congress or a court steps in and takes action, this is the way that it will continue to be: The Commission's media ownership regulations will never be relaxed. Efforts to promote diversity will remain stalled. The law, the marketplace, and common sense will continue to be ignored.

Today's result is all the more unfortunate because compromise was well within reach. For example, a bipartisan majority of commissioners was willing to repeal the outdated Newspaper-Broadcast Cross-Ownership Rule. But for some reason, we were told that this rule would not be repealed *unless all commissioners agreed*. And sadly, one chose to exercise that veto.

As someone who has been on the losing end of more 3-2 votes than I care to remember, I am baffled by this new requirement for unanimity. We've been told for years by the FCC's leadership that 3-2 votes are what democracy is all about. Except, I guess, when it isn't. Or more precisely, 3-2 votes are what democracy is all about so long as the commissioners are divided cleanly along party lines. As a result, we end up keeping a rule on the books that almost no one at the FCC actually believes make sense any longer. This is a shame because our regulations should always be shaped only by the facts and law—not crass political considerations.

If I were to detail all of this *Order*'s deficiencies, my dissenting statement would be almost as long as the *Order* itself (161 pages). In the interest of space, I'll focus on what I consider to be the *Order*'s most problematic aspects: (1) doubling down on the Newspaper-Broadcast Cross-Ownership Rule; (2) tightening, rather than loosening, the Local Television Ownership Rule; and (3) failing to take meaningful action to promote diversity.

I.

The newspaper industry is in crisis. Since the FCC adopted the Newspaper-Broadcast Cross-Ownership Rule in 1975, approximately one-quarter of newspapers in the United States have gone out of

[2] *See*, *e.g.*, Daniel Victor & Mike McPhate, "Critics of Police Welcome Facebook Live and Other Tools to Stream Video," *The New York Times* (July 7, 2016) (discussing "the power of [online] video, especially when live, in drawing public attention"), *available at* http://nyti.ms/29lMKOS.

[3] *Prometheus Radio Project v. FCC*, 652 F.3d 431, 437 (3d Cir. 2011).

[4] *Prometheus Radio Project v. FCC*, 824 F.3d 33, 37 (3d Cir. 2016) (quoting *Public Citizen Health Research Group v. Chao*, 314 F.3d 143, 158 (3d Cir. 2002)) (emphasis and internal quotation marks omitted) (*Prometheus III*).

[5] *Id.*

business.[6] That's over 400 publications.[7] In the last decade, newspapers have shut down in Denver, Tucson, Cincinnati, Honolulu, Tampa, and other major cities.[8] Other newspapers, including the *New Orleans Times-Picayune* and the *Birmingham News*, no longer publish on a daily basis.[9] Still others, such as the *Seattle Post-Intelligencer*, have abandoned the print medium altogether and now exist only as a digital platform.[10]

Since 1975, the population of the United States has increased 49% while total newspaper circulation is down by one-third, with the substantial majority of that decline occurring since 2000.[11] Adjusting for inflation, newspaper advertising revenues, both print and digital, are down 64% since 2000, from $65.8 billion to $23.6 billion.[12] And since 2000, employment in newspaper newsrooms has dropped by 42%.[13]

Earlier this month, Warren Buffett, whose company owns 32 newspapers across the country, summarized the bleak picture: "[L]ocal newspapers continue to decline at a very significant rate. And even with the economy improving, circulation goes down, advertising goes down, and it goes down in prosperous cities, it goes down in areas that are having urban troubles, it goes down in small towns—that's what amazes me."[14]

Of course, newspaper reporters continue to do important work throughout our country each and every day. Many were recently reminded of the impact that their stories can have through the 2015 film *Spotlight*, which won the Academy Award for Best Picture. The movie focused on *The Boston Globe*'s investigation into widespread child sex abuse by Roman Catholic priests in and around Boston—reporting that ended up having a worldwide impact on the Catholic Church. But given the newspaper industry's profound financial troubles, it is becoming harder and harder for publications to do this type of investigatory journalism, hold our elected officials to account, and let Americans know what is going on in their communities.

That's why it makes no sense for the government to be discouraging investment in the newspaper industry. In this day and age, if you are willing to invest in a newspaper, we should be thanking you, not imposing regressive regulations. But that is precisely what the Commission is doing in this *Order* by maintaining the Newspaper-Broadcast Cross-Ownership Rule.

Our action (or, to be more accurate, lack of action) is particularly unfortunate because broadcasters are well-situated to partner with newspapers. The reason is simple. Investments in newsgathering are more likely to be profitable when a company can distribute information over multiple

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[6] *See* Letter from Rick Kaplan, General Counsel and Executive Vice President, and Jerianne Timmerman, Senior Vice President and Deputy General Counsel, NAB, to Marlene H. Dortch, Secretary, FCC, MB Docket No. 14-50, 09-182, at 2 (July 7, 2016) (NAB July 7 *Ex Parte* Letter).

[7] *See id*.

[8] *See* Newspaper Death Watch: Chronicling the Decline of Newspapers and the Rebirth of Journalism, http://newspaperdeathwatch.com/ (Aug. 16, 2016).

[9] *See id*.

[10] *See* William Yardley and Richard Pérez Peña, "Seattle Paper Shifts Entirely to Web," *The New York Times* (Mar. 16, 2009), *available at* http://nyti.ms/2bM4ytt.

[11] Daily circulation was 60.655 million in 1975, 55.773 million in 2000, and 40.420 million in 2014. *See* Newspaper Association of America, Newspaper Circulation Volume, http://bit.ly/2b2r9f2 (linked spreadsheet) (Aug. 16, 2016).

[12] *See* NAB FNPRM Comments at 71.

[13] *See* NAB July 7 *Ex Parte* Letter at 3–4.

[14] Jake Sherman and Anna Palmer with Daniel Lippman, "EXCLUSIVE PLAYBOOK INTERVIEW: Warren Buffett!—Dem EMAIL HACK 'wider than believed'—KASIE HUNT engaged—B'DAY: David Brooks," *Politico*, http://politi.co/2aMjqC1 (Aug. 11, 2016).

platforms. This is not just a theory. Because the FCC grandfathered newspaper-broadcast combinations that predated the 1975 adoption of the Newspaper-Broadcast Cross-Ownership Rule, we have seen this theory play out in practice across the United States.

The National Association of Broadcasters has pointed to no fewer than 15 studies demonstrating that newspaper-television cross-ownership increases the quantity and/or quality of news broadcast by cross-owned television stations.[15] These studies span almost four decades, and some were commissioned by the FCC itself. For example, one FCC-sponsored study in 2007 found that newspaper cross-owned TV stations supply about 7–10% more local news coverage and about 25% more coverage of state and local politics, on average, than non-cross-owned stations.[16] And another FCC-sponsored study that same year found that cross-owned TV stations broadcast 11% more news programming than non-cross-owned stations.[17] The same is true with respect to newspaper-radio cross-ownership. An FCC-sponsored study found that a cross-owned radio station is four to five times more likely to have a news format than a non-cross-owned station.[18]

And we need not rely on statistics alone. The record contains numerous unrebutted examples of how newspaper-broadcast cross-ownership has provided more comprehensive news coverage to communities throughout our nation, including Atlanta, Cedar Rapids, Milwaukee, Phoenix, South Bend, Spokane, Topeka, and Amarillo.[19] In Dayton, for example:

> Cox Media Group's cross-ownership of the *Dayton Daily News* and CBS affiliate WHIO-TV helped to uncover one of the most prominent stories of [2014]: the mismanagement of the Department of Veterans Affairs. Working together, journalists at the newspaper and television station analyzed the quality of care that veterans were receiving, and discovered that the Department had paid more than $36 million to settle claims resulting from treatment delays. Months of congressional inquiries, national and global media studies, and, ultimately, the resignation of the Secretary of Veterans Affairs followed. These treatment delays would not have come to light had it not been for the dogged efforts of *both* the newspaper and television reporters, working together.[20]

So in the face of all of this data and evidence, why does the Commission choose to retain the Newspaper-Broadcast Cross-Ownership Rule? It claims that this regulation remains necessary to promote viewpoint diversity.[21] But the evidence overwhelmingly shows that there is little if any connection between viewpoint diversity and ownership.[22] Most notably, a 2011 FCC-sponsored study found no statistically significant relationship between ownership and viewpoint diversity, and a 2012 update to that study actually found viewpoint diversity to be positively associated with the number of co-owned

[15] NAB FNPRM Comments at 75–76.

[16] *See* Jeffrey Milyo, The Effects of Cross-Ownership on the Local Content and Political Slant of Local Television News (2007).

[17] *See* Daniel Shiman, The Impact of Ownership Structure on Television Stations' News and Public Affairs Programming (2007).

[18] *See* Craig Stroup, Factors that Affect a Radio Station's Propensity to Adopt a News Format (2007).

[19] *See* NAA FNPRM Comments at 3–10; Morris Communications Co., LLC FNPRM Comments at 17–23.

[20] NAA FNPRM Comments at 5–6 (emphasis in original).

[21] *Order* at para. 142.

[22] *See* NAB FNPRM Comments at 79–82, App. C (listing 15 studies).

television stations in a market.[23] Indeed, research generally shows that a media outlet's viewpoint is driven by the preferences of its audience rather than ownership.[24]

But the larger problem with the Commission's conclusion is that it ignores the realities of the modern media marketplace. This isn't the 1970s anymore. Most Americans don't wait for the morning newspaper or the 11:00 PM newscast to learn what's going on around the globe or at home. That world set sail with *The Love Boat*. Today, most Americans get the information they want when they want it by going online and scouring a wide variety of sources, including digital-only news outlets and social networks such as Facebook and Twitter. When it comes to news, we can now choose from an amazingly diverse array of options. Last year, for example, Pew Research Study counted 143 news providers in Denver alone.[25]

The record contains a plethora of statistics detailing how the Internet has transformed the American people's consumption of news and information, and I don't believe that it is necessary to review all of them here. Instead, I'll focus on two other glaring problems with the Commission's analysis that render its decision to retain the Newspaper-Broadcast Cross-Ownership rule in the name of viewpoint diversity fatally flawed.

First, the Commission contends that newspapers and broadcast television stations "continue to be the predominant providers of local news and information upon which consumers rely."[26] But then, in order to justify retaining the prohibition against common ownership of a newspaper and a radio station, the Commission also claims that "broadcast radio stations continue to be an important source of viewpoint diversity in local markets."[27]

These statements place the Commission on the horns of a dilemma. The only reason that the Commission performs a stunning about-face and suddenly claims that radio stations are a significant source of viewpoint diversity[28] is so that it can retain the Newspaper-Radio-Cross Ownership Rule (which generally prohibits cross-ownership). But if radio stations are an important source of viewpoint diversity, then they must be included in the total number of voices in the market. And if that is true, then there is no way that the agency's Newspaper-Broadcast Cross-Ownership Rule can survive.[29]

Take the New York City media market, for example. If there are five major newspapers, over twenty television stations, and about 60 radio stations in the market contributing to viewpoint diversity, then how can prohibiting a newspaper from purchasing a single one of those radio stations or television stations be necessary to preserve viewpoint diversity? With over 80 voices in the market, how can common ownership of just two cause a problem?

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[23] *See* Adam D. Rennhoff and Kenneth C. Wilbur, Local Media Ownership and Viewpoint Diversity in Local Television News (2011); Adam D. Rennhoff and Kenneth C. Wilbur, Further Revisions to Local Media Ownership and Viewpoint Diversity in Local Television News (2012).

[24] *See, e.g.*, Matthew Gentzkow and Jesse M. Shapiro, *What Drives Media Slant? Evidence from U.S. Daily Newspapers*, 78 ECONOMETRICA 35 (2010); Sendhil Mullainathan and Andrei Shleifer, *The Market for News*, 95 AM. ECON. REV. 1031 (2005).

[25] *See* Pew Research Center, *Local News in a Digital Age* at 4 (Mar. 5, 2015).

[26] *Order* at para. 142.

[27] *Id*.

[28] *See, e.g.*, *2014 Quadrennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996 et al.*, MB Docket No. 14-50, Further Notice of Proposed Rulemaking and Report and Order, 29 FCC Rcd 4371, 4435–36, paras. 144–45 (2014) (*2014 Quadrennial Review Notice*).

[29] Conversely, if radio stations are *not* an important source of viewpoint diversity, then the Newspaper-Radio Cross-Ownership Rule must be eliminated.

Second, the Commission discounts the rise of the Internet by arguing that most of the news found there is provided by websites affiliated with traditional providers, such as newspapers.[30] (This myopic conclusion itself would be news to a wide variety of popular online upstarts, ranging from locally-focused platforms such as *The Texas Tribune*, which earned two Online News Association awards last year for explanatory and topical reporting, and *Voice of San Diego*, which has won national awards for its investigative reporting, to more nationally-focused platforms like BuzzFeed, Vox Media, and Yahoo! News.) But the FCC's regulation only precludes the common ownership of a broadcast station and a newspaper *if the newspaper publishes at least four times a week*. So, for example, newspapers such as the *Patriot-News* of Harrisburg, Pennsylvania, or the *Press-Register* of Mobile, Alabama, which print only three days a week but update their websites constantly, may be commonly owned with a television station.

How does this make any sense? If the content that a newspaper provides on its website is critical to the retention of the Newspaper-Broadcast Cross-Ownership Rule, why should it matter how many days a week it circulates a print edition? So long as newspapers regularly update their websites with breaking news and information, why should a newspaper that offers a print edition seven days a week be treated differently than one that only distributes three print editions a week? Or a newspaper that has chosen to go entirely online? Why should we create an incentive for newspapers to cut back on print editions in order to get more favorable regulatory treatment? The *Order* offers no answers to these questions. That there are no good ones highlights how outdated the Newspaper-Broadcast Cross-Ownership Rule has become. At a time when more and more content is being consumed over the Internet, it makes no sense to base ownership regulations on whether a news outlet distributes a print edition and/or how many times a week it does so. The product, not pulp, is what matters.

Perhaps recognizing its difficulty in justifying the retention of the Newspaper-Broadcast Cross-Ownership, the Commission purports to "provide for a modest loosening" of it.[31] However, the modest steps that it sets forth are entirely inadequate and largely illusory.

To begin with, the Commission adopts an express exception "for proposed combinations involving a failed or failing newspaper, television station, or radio station."[32] But the newspaper industry has explained that this standard's specific criteria "will not open any opportunities for newspaper companies to obtain investment from the media industry, and certainly will not serve the public interest."[33] And there is an even more fundamental problem with this exception. By the time that a newspaper has failed or is failing, it might be too late to save and/or might not be an attractive investment opportunity for a broadcaster. Our goal should be to maintain newspapers as healthy and vibrant institutions. We shouldn't deprive them of the investment they need to thrive until they are at death's doorstep and then hope that someone will swoop in at the last minute to save them.

Additionally, the Commission states that companies may obtain a waiver of the Newspaper-Broadcast Cross-Ownership Rule if they are able "to show that their proposed combination would not unduly harm viewpoint diversity in the local market."[34] What does this mean? Who knows? Curiously, the Commission rejects re-adopting the four-factor test that applied to waiver requests under the vacated 2007 modification of the Newspaper-Broadcast Cross-Ownership Rule because it claims that those factors (*e.g.*, whether the combined entity would significantly increase the amount of local news in the market)

[30] *See Order* at para. 148 & note 389.

[31] *Order* at para. 130.

[32] *Order* at para. 173.

[33] Letter from Danielle Coffey and Kurt Wimmer, Newspaper Association of America, to Marlene H. Dortch, Secretary, FCC, MB Docket Nos. 14-50, 09-182, 07-294, at 2 (Aug. 9, 2016).

[34] *Order* at para. 187.

"would be vague, subjective, difficult to verify, and costly to enforce."[35] But the waiver standard adopted by the Commission today is far vaguer and more subjective than the 2007 standard for it lacks *any* objective criteria. "Knowing it when we see it" is hardly the stuff of administrative precision.

Moreover, we've seen this song-and-dance before. When the Commission adopted JSA restrictions two years ago, it set up a similar waiver process to preserve beneficial JSAs that it publicly touted when useful for defending its new policy.[36] But that process was a sham. For the entire time that the Commission's JSA restrictions were in effect, not one waiver request was granted. (That may have been one reason why Congress, in an overwhelming bipartisan vote, required that the FCC protect existing JSAs.[37]) I have little doubt that the same thing will happen here.

Where does that leave us? In the face of overwhelming evidence of the newspaper industry's dire condition, the benefits that newspaper-broadcast cross-ownership could bring, and a media marketplace transformed by the Internet, the Commission chooses to leave in place an absurdly antiquated rule that reduces investment in the newspaper business. The FCC's decision is not based on the law or the facts in the record. Nor is it based on common sense. For example, does anyone seriously believe that allowing a newspaper to buy a single radio station in any American city would harm anyone? But politics—in particular, fear of partisan special interests in the Beltway that have banged the same sad drum for years (ironically, mainly online)—has made it impossible for us to repeal this rule.

At this rate, absent congressional or judicial intervention, the Newspaper-Broadcast Cross-Ownership Rule will outlive print newspapers themselves.

II.

In this *Order*, the Commission refuses to relax its Local Television Ownership Rule. This rule prohibits anyone from owning two television stations in a Designated Market Area (DMA) unless at least one of those stations falls outside the top-four stations in the market (top-four prohibition) and there are at least eight independently-owned television stations in the DMA (eight-voices test).

However, record evidence demonstrates that the eight-voices test lacks any foundation in economics or the realities of today's television marketplace. Indeed, repealing that test would promote competition and localism in the video marketplace.

For one, the eight-voices test has no basis in modern competition theory and is inconsistent with fundamental antitrust principles.[38] The test often prohibits mergers that "are unlikely to have adverse competitive effects and ordinarily require no further analysis," according to the United States Department of Justice & Federal Trade Commission's Horizontal Merger Guidelines.[39] And it often prohibits transactions that do not create a presumption of increased market power according to those guidelines.[40] Simply put, in no other industry does the government condition mergers and acquisitions on the

[35] *Order* at note 542.

[36] *See 2014 Quadrennial Review Notice*, 29 FCC Rcd at 4540, para. 364.

[37] *See* Consolidated Appropriations Act, 2016, § 628, Pub. L. No. 114-113 (2015).

[38] Kevin W. Caves and Hal J. Singer, An Economic Analysis of the FCC's Eight Voices Rule, at 9–16 (July 19, 2016) (Caves & Singer Study), *attached to* Letter from Rick Kaplan, General Counsel and Executive Vice President, and Jerianne Timmerman, Senior Vice President and Deputy General Counsel, NAB, to Marlene H. Dortch, Secretary, FCC, MB Docket Nos. 14-50, 09-182 (July 19, 2016).

[39] *See* Caves & Singer Study at 12, 14.

[40] *See id*. at 14.

maintenance of eight independent competitors in a market. Indeed, under modern antitrust principles, the government does not impose any rigid screen at all.[41]

For this reason, economists Kevin Caves and Hal Singer have concluded that the eight-voices test "does not constitute a reliable competitive screening device. Instead, [it] imposes a presumption of anticompetitive effects over transactions that would not justify such a presumption under standard antitrust practice. [It] compounds this error by making its presumption impossible to overturn, regardless of evidence of procompetitive merger-driven efficiencies."[42]

Caves and Singer's analysis of advertising prices in all local television markets bears out their conclusion.[43] Controlling for other factors, they found no statistically meaningful difference between advertising rates in markets with eight or more independently owned and operated television stations and advertising rates in markets with fewer voices.[44] Moreover, their econometric analysis demonstrated that reducing the number of voices in a market has the impact of *lowering* advertising rates rather than *raising* them, and that this effect holds true whether or not there are fewer than eight voices in a market.[45] Specifically, in markets with fewer than eight voices, local advertising rates are expected to fall by 2.9% with each decrease in the voice count. And in markets with eight or more voices, such rates are expected to fall by 2.4% with each decrease in the voice count.[46]

These findings are fatal to the eight-voices test. First, they demonstrate that there is no meaningful competitive difference between markets with fewer than eight voices and those with eight or more. In each type of market, the response to the reduction in the voice count is similar; advertising rates are statistically the same controlling for other factors. There is no significance to maintaining eight independently owned and operated stations in a market. Thus, that number is entirely arbitrary.

Second, the Caves and Singer findings demonstrate that reducing the voice count by one in a market with fewer than eight voices leads to a more competitive market, not a less competitive one. As reviewed above, when the voice count is reduced by one in such markets, advertising prices fall, not rise, in a statistically significant way.[47]

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[41] *See id*. at 13. Rather, the starting point for merger analysis is the Herfindahl-Hirschman Index (HHI), which is used to assess how much individualized scrutiny a transaction requires.

[42] *See id*. at 15–16.

[43] *See id*. at 21–28.

[44] *See id*. at 24–26.

[45] *See id*. at 26–28.

[46] *See id*. at 28.

[47] Unable to formulate a substantive response to the Caves & Singer Study, the Commission refuses to consider it, claiming that it was submitted too late. *See Order* at note 147. But this study merely provides additional empirical support for arguments that the National Association of Broadcasters (NAB) has advanced throughout the 2010 and 2014 Quadrennial Reviews. *See, e.g.*, NAB FNRPM Comments at 39, 55 (arguing that the eight-voices test is "arbitrary" and "makes no sense"). As such, the Commission may not simply disregard it, and the authority that the *Order* relies upon for doing so is inapposite. In *Verizon v. FCC*, 770 F.3d 961, 968 (D.C. Cir. 2014), for example, the D.C. Circuit said that the Commission was not obliged to consider a late-filed proposal for partial forbearance. Here, however, the Caves & Singer Study and NAB's accompanying *ex parte* letter advanced no new proposal. Rather, they provided support for the NAB's longstanding proposal in this proceeding for the FCC to eliminate the eight-voices test. Similarly, in *Globalstar, Inc. v. FCC*, 564 F.3d 476, 484 (D.C. Cir. 2009), the D.C. Circuit ruled that a party had not provided the Commission with a fair opportunity to pass upon an argument by raising it the day an order had been adopted. That case, however, deal with an entirely new claim of inadequate notice. Here, by contrast, NAB merely submitted additional support for a claim that it has advanced for years during this proceeding. Moreover, the Caves & Singer Study was submitted weeks before this *Order* was adopted, not the day of adoption. While the Commission notes that UCC cites rule 1.415(d) ("No additional comments may be filed unless specifically requested or authorized by the Commission") in opposing consideration of the Caves & Singer Study, (continued….)

Another indication that the eight-voices test impedes competition and localism in the video marketplace is the mass of record evidence showing that common ownership of television stations in local television markets leads to *more* local news and information programming.[48] According to the Commission, "[t]he data demonstrate that the duopolies permitted subject to the restrictions of the current rule have created tangible public interest benefits for viewers in local television markets that offset any potential harms associated with common ownership. Such benefits include substantial operating efficiencies, which potentially allow a local broadcast station to invest more resources in news or other public interest programming that meets the needs of its local community."[49] In other words, common ownership increases competition and localism by creating stronger, better-funded competitors.

But the eight-voices test denies those benefits produced by common ownership to viewers in most of our nation's television markets. And those markets are the ones where the efficiencies of common ownership can yield the greatest benefits: smaller markets where advertising dollars (typically the source of funding for local programming) are scarce.

In contrast, the *Order*'s justification for maintaining the eight-voices test is utterly devoid of factual support. Indeed, all the Commission can muster in support of the eight-voices test is two paragraphs of unsupported assertions. In the first, the *Order* says:

> Nearly every market with eight or more full-power television stations—absent a waiver of the Local Television Ownership Rule or unique circumstances—continues to be served by each of the Big Four networks and at least four independent competitors unaffiliated with a Big Four network. Competition among these independently owned stations serves an important function by motivating both the major network stations and the independent stations to improve their programming, including increased local news and public interest programming. This competition is especially valuable during the parts of the day in which local broadcast stations do not transmit the programming of affiliated broadcast networks and rely on local content uniquely relevant to the stations' communities.[50]

Let's unpack this. The Commission begins by arguing that competition between stations affiliated with the Big Four networks and at least four independent competitors unaffiliated with a Big Four network "serves an important function by motivating both the major network stations and the independent stations to improve their programming, including increased local news and public interest programming."[51] But what evidence does the Commission cite to support this proposition? What evidence does it marshal to show that the presence of stations unaffiliated with a Big Four network improves the quality of programming in a television market? What evidence does it produce to show that

(Continued from previous page)
see Order at note 147 (citing 47 C.F.R. § 1.1415(d)), the note to that rule specifically provides that in some rulemaking proceedings, "interested persons may also communicate with the Commission and its staff on an *ex parte* basis, provided that certain procedures are followed." In this proceeding, *ex parte* communications were specifically allowed by the Commission. *See 2014 Quadrennial Review Notice*, 29 FCC Rcd at 4546, para. 378. Indeed, this *Order* is replete with references to *ex parte* communications. *See, e.g.*, *Order* at note 204. Moreover, NAB indisputably complied with all relevant procedures in submitting the Caves & Singer Study. Finally, it is important to recognize that the Commission frequently accepts and relies upon data and studies that it receives shortly before an order is adopted. *See, e.g.*, *Amendment of Part 15 of the Commission's Rules for Unlicensed Operations in the Television Bands, Repurposed 600 MHz Band, 600 MHz Guard Bands and Duplex Gap, and Channel 37 et al.*, ET Docket No. 14-165, Report and Order, 30 FCC Rcd 9551, 9636, 9639, nn.523, 539 (2015) (citing and relying upon a 128-page technical study and a 16-page technical study that had been submitted to the Commission as an *ex parte* filing seventeen days before the *Order*'s adoption).

[48] *See, e.g.*, *Order* at note 86.

[49] *Order* at para. 38.

[50] *Order* at para. 56 (footnotes and citations omitted).

[51] *Id*.

such independent stations lead to increased local news and public interest programming? The answer to each of these questions is the same: None.[52]

And even if the Commission were able to offer some evidence to back up its assertions, the question would then become: Why is it important to have at least four independent competitors unaffiliated with a Big Four network in a market? Why wouldn't two or three suffice? Or, on the other hand, why not five or six? The *Order* makes a feeble attempt to address those questions in its next paragraph:

> We continue to believe the minimum threshold maintained by the eight-voices test helps to ensure robust competition among local television stations in the markets where common ownership is permitted under the rule. The eight-voices test increases the likelihood that markets with common ownership will continue to be served by stations affiliated with each of the Big Four networks as well as at least four independently owned and operated stations unaffiliated with these major networks. Also, because a significant gap in audience share persists between the top-four stations in a market and the remaining stations in most markets—demonstrating the dominant position of the top-four-rated stations in the market—we continue to believe that it is appropriate to retain the eight-voices test, which helps to promote at least four independent competitors for the top-four stations before common ownership is allowed. Accordingly, we retain the eight-voices test.[53]

This explanation brings to mind the classic Peggy Lee song: *Is That All There Is*?

To be sure, I agree that the eight-voices test "increases the likelihood that markets with common ownership will continue be served by stations affiliated with each of the Big Four networks as well as at least four independently owned and operated stations unaffiliated with these major networks."[54] But again, the key question is: Why is it important to have "four independently owned and operated stations unaffiliated with these major networks?" The only justification the Commission provides is the assertion that "a significant gap in audience share persists between the top-four stations in a market and the remaining stations in most markets."[55] But even assuming that to be true, how does this justify the choice of maintaining "four independently owned and operated stations unaffiliated with the major networks," as opposed to two, three, five, or six? The *Order* offers no explanation, cites no evidence, and refers to no economic theory. It appears that the number four, and thus the eight in the "eight-voices test," was plucked out of thin air. Moreover, if there is a significant gap in audience share between the top-four stations and the other stations in a market, wouldn't that suggest common ownership of non-top four stations would be pro-competitive, insofar as it would allow for stronger competitors to the top-four stations to emerge?

But it gets even worse. The Commission readopts the restrictions on joint sales agreements (JSAs) that were vacated by the Third Circuit in *Prometheus III*—restrictions which have the practical effect of tightening the Local Television Ownership Rule. The Commission provides little new analysis to justify these limits. Rather, it "incorporate[s] by reference the rationale articulated" in its 2014 *Order*.[56] As such, rather than repeat at length the arguments that I advanced against the Commission's

[52] Neither does the *Order* offer any explanation for why stations unaffiliated with a Big Four network play a distinct competitive role in the marketplace than those affiliated with a Big Four network. Many of these stations, after all, are not independent stations. Rather, they are affiliated with a national network, such as the CW or Univision.

[53] *Order* at para. 57 (footnotes and citations omitted).

[54] *Id*.

[55] *Id*.

[56] *Order* at para. 62.

JSA decision two years ago, I similarly incorporate by reference the relevant portions of my 2014 dissenting statement.[57] However, it is worth emphasizing three points.

First, just as the Commission is unable to point to any evidence to justify retaining the eight-voices test, neither is it able to cite any evidence supporting its decision to readopt JSA restrictions. Back in 2014, the Commission based its decision on its hypothesis that a JSA allows one station to exert undue influence over another station's programming decision and operations. But as I pointed out at the time, the Commission couldn't come up with "a single example of a station in a JSA exercising undue influence over another station."[58] Indeed, it couldn't round up "a single instance where a JSA has allowed one station to influence *a single programming decision* of another station."[59]

Flash forward two years. Despite the fact that numerous television stations across the country have participated in JSAs for many years, the Commission *still* cannot find a single case in which one station in a JSA has exercised undue influence over another station or influenced a single programming decision of another station. The Commission's JSA analysis remains unjustified jabberwocky.

Second, in my 2014 dissenting statement, I reviewed at length all of the public interest benefits that have been produced by JSAs.[60] In this *Order*, the Commission does not contest any of those benefits. Instead, it claims that "[t]he arguments that television JSAs should not be attributed because they produce public interest benefits are essentially indistinguishable from arguments that the ownership limits should be relaxed because common ownership produces public interest benefits. We acknowledge and address these arguments throughout; however, we ultimately determine that the Local Television Ownership Rule should be retained with a minor modification to the contour standard."[61]

But here's the problem with that evasion. Maintaining the status quo with respect to JSAs is *not* the equivalent of relaxing the Local Television Ownership Rule. Rather, as the Third Circuit recognized, "[a]ttribution of television JSAs modifies the Commission's ownership rules by making them more stringent."[62] And the Commission's JSA decision here does not contain any rationale whatsoever for why the local television ownership rule should be tightened. In fact, it concludes that the benefits of making the rule more stringent are outweighed by the harms of taking that step.[63]

So on one side of the ledger, we have uncontested evidence of the public interest benefits yielded by JSAs. And on the other side of the ledger, the Commission points to no evidence of any corresponding harms and does not advance any argument for why the Local Television Ownership Rule should be made any stricter. Yet, it does just that. This deliberate refusal to make a "rational connection between the facts found and the choice made" defines arbitrary and capricious decision-making.[64]

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[57] *2014 Quadrennial Review Notice*, 29 FCC Rcd at 4590–95, 4597–99 (Dissenting Statement of Commissioner Ajit Pai).

[58] *Id*. at 4597.

[59] *Id*. (emphasis in original).

[60] *See id*. at 4592–95.

[61] *Order* at note 176.

[62] *Prometheus III*, 824 F.3d at 58.

[63] *See Order* at para. 38.

[64] *Prometheus III*, 824 F.3d at 40 (quoting *Motor Vehicle Manufacturers Association of the United States, Inc. v. State Farm Mutual Automobile Insurance Co.*, 463 U.S. 29, 43 (1983).

Third, the decision to attribute television JSAs is fundamentally inconsistent with the Commission's other recent attribution decisions.[65] Consider, for example, last year's repeal of the attributable material relationship (AMR) rule in the context of wireless spectrum. The AMR rule used to require that the revenues of any company leasing or reselling more than 25% of the spectrum capacity of a small business's wireless license must be attributed to that small business. In 2015, however, the same Commission majority as here concluded that the AMR rule was "overbroad" and "we no longer need[ed] a bright-line, across-the-board, attribution rule to ensure that a small business makes independent decisions about its business operations."[66] This followed a 2014 decision where the same Commission majority as here waived the AMR rule for a private equity firm that leased 100% of its spectrum capacity to our nation's two largest wireless carriers. There, the Commission reasoned that the firm in question would not necessarily be "unduly influence[d]" by the wireless carriers leasing all of their spectrum capacity because of the firm's representation that the "agreements at issue did not confer any" such influence.[67]

So here is where we are today. Under the Commission's rules, a small business can lease 100% of its spectrum capacity to a Fortune 50 wireless carrier—that is, engage in pure, profitable arbitrage—without *any* attribution requirement being triggered. Yet, as a result of today's *Order*, attribution will automatically kick in whenever one television station sells more than 15% of another television station's advertising time.

How does this make any sense? The Commission purports to attribute television JSAs because selling 16% of a station's advertising inventory gives licensees "the opportunity, ability, and incentive to exert significant influence over the brokered station."[68] Yet, one company leasing *all* of another company's spectrum does not give rise to the same concerns regarding undue influence? A company depending upon a 100% spectrum lease is plainly more subject to undue influence than a television station that agrees to let another station sell 16% of its advertising. However, the *Order* offers no reason why the latter relationship, but not the former, triggers an attribution requirement. As I've written before in commenting upon the 2014 waiver of the AMR rule, "A foolish consistency may be the hobgoblin of little minds, but a deliberate inconsistency is the ogre of arbitrariness."[69]

III.

The Commission spends almost 50 pages discussing the issue of ownership diversity in this *Order*. That's certainly a lot of talk. But what concrete action does this Commission take to advance diversity in the *Order*? One thing: It reinstates the very same "eligible entity" definition that the Third Circuit rejected five years ago. To describe this decision is to discredit it.

During my time at the Commission, I have made it a priority to encourage greater diversity in the broadcast industry. Each summer, for example, I meet with those participating in the Broadcast Leadership Training (BLT) Program, run by the National Association of Broadcasters Education Foundation. The BLT program educates a diverse group of executives who aspire to be station owners or

[65] *See* Letter from Rick Kaplan, General Counsel and Executive Vice President, and Jeannine Timmerman, Deputy General Counsel and Senior Vice President, NAB, to Marlene H. Dortch, Secretary, FCC, MB Docket Nos. 14-50, 09-182, at 2–3 (July 29, 2016).

[66] *Updating Part 1 Competitive Bidding Rules et al.*, WT Docket Nos. 14-170 et al., Report and Order, Order on Reconsideration of the First Report and Order, Third Order on Reconsideration of the Second Report and Order, Third Report and Order, 30 FCC Rcd 7493, 7504, para. 21 (2015).

[67] *Grain Management, LLC's Request for Clarification or Waiver of Section 1.2110(b)(3)(iv)(A) of the Commission's Rules et al.*, WT Docket Nos. 05-211 et al., Order, 29 FCC Rcd 9080, 9084–85, paras. 13–14 (2014) (*Grain Waiver Order*).

[68] *2014 Quadrennial Review Notice*, 29 FCC Rcd at 4527, para. 340.

[69] *Grain Waiver Order*, 29 FCC Rcd at 9091 (Dissenting Statement of Commissioner Ajit Pai).

managers by exposing them to "the fundamentals of purchasing, owning, and running a successful operation of radio and television stations."[70] Each time, I come away inspired by their spirit and optimistic about the future of broadcasting. These sessions also reinforce my determination to do what I can at the FCC to expand opportunities in the industry.

Occasionally, I have been successful. For example, the progress that the FCC has been able to make in revitalizing AM radio, the nation's most diverse broadcast service, has been a big step forward. But too often, the Commission has fallen short. The FCC's leadership has prioritized setting aside spectrum for unlicensed operations in the post-auction television band over saving low-power television stations that often serve minority communities. It has allowed the Advisory Committee for Diversity in the Digital Age to lay dormant. And in this *Order*, it falls short once again.

I am particularly disappointed that the Commission refuses once again to adopt an incubator program, which would allow established broadcasters to provide financing and other forms of assistance to new entrants looking to break into the broadcasting business. This proposal enjoys the support of civil rights organizations, including the National Urban League, LULAC, the Rainbow/PUSH Coalition, the National Council of La Raza, the Minority Media and Telecommunications Council, and the Asian American Justice Center.[71] It enjoys the support of industry.[72] One would think that moving forward with this initiative would be a no-brainer.

The Commission claims that an incubator program would be too difficult to administer and consume too many staff resources.[73] But it is difficult to take that argument seriously. When the FCC's leadership thinks that an issue is important, it is more than willing to adopt regulations that are difficult to administer and consume an enormous amount of staff resources, far more than any incubation program would. Moreover, as detailed in the *Order* itself,[74] the Commission has expended a lot of staff resources *studying* the broadcast diversity issue. If we think that diversity is important, why not spend less time researching the issue and more time actually *doing* something to make things better?

In my view, the real reason why the Commission refuses to adopt an incubator program is ideological in nature. In order to incentivize broadcasters to incubate a new entrant, the FCC would allow participating broadcasters to own one more radio station in a market than they otherwise could under the local ownership rule. A small number oppose this because they fear that this slight and targeted relaxation of our ownership rules would promote concentration in the radio industry. But my response to them is simple. The benefits of incubating a new voice in a market would far outweigh any such harm, especially since an incubator is likely to be most valuable in small-town markets where finding broadcast spectrum is easy but the economics of the broadcast business are hard.

* * *

As we bring our 2010 Quadrennial Review to an end, it is worth stepping back and looking at the FCC's actions over the past few years from a broader perspective. In the many years in which the 2010 Quadrennial Review has been pending, the Commission has approved the $13.8 billion purchase by our nation's largest cable operator (Comcast) of one of our nation's top four broadcast networks (NBC). It has signed off on the $49 billion merger of our nation's second and fifth largest multichannel video programming distributors (AT&T and DIRECTV). And it has blessed a single $79 billion transaction

[70] *See* National Association of Broadcasters Education Foundation, Broadcast Leadership Training, http://nabef.org/blt/default.asp (last visited Aug. 18, 2016).

[71] *See, e.g.*, Initial Comments of the Diversity and Competition Supporters in Response to the Third Further Notice of Proposed Rulemaking, MB Docket No. 07-294, at 19–21 (July 30, 2008).

[72] *See, e.g.*, NAB FNPRM Comments at 92–93; NAA FNRPM Comments at 15.

[73] *See Order* at paras. 319–21.

[74] *See Order* at paras. 246–70.

combining our nation's second, third, and sixth largest cable providers (Charter, Time Warner Cable, and Bright House).

Yet today, after many years of delay and "deliberation," the FCC tells us the prospect of a newspaper purchasing a single television or radio station for relative pocket change still shocks the conscience? One television station selling more than 15% of another's advertising inventory in order to cut costs is a dire threat to competition? A program to incubate diverse voices in the broadcast industry is a bridge too far because it would allow some companies to own an additional radio station in a market? It makes no sense at all.

Soon, I expect outside parties to deliver us to the denouement: a decisive round of judicial review. I hope that the court that reviews this sad and total abdication of the administrative function finds, once and for all, that our media ownership rules can no longer stay stuck in the 1970s consistent with the Administrative Procedure Act, the Communications Act, and common sense. The regulations discussed above are as timely as "rabbit ears," and it's about time they go the way of those relics of the broadcast world. I am hopeful that the intervention of the judicial branch will bring us into the digital age.

For all of these reasons, I dissent.

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Total Call Mobile, Inc.	)	File No.: EB-IHD-14-00017650
	)	Acct. No.: 201632080004
	)	FRN: 0017274911
	)	
	)	

ORDER

Adopted: December 22, 2016 **Released: December 22, 2016**

By the Chief, Enforcement Bureau:

1. The Enforcement Bureau (Bureau) of the Federal Communications Commission (Commission) and Total Call Mobile, Inc. (TCM), have entered into a Consent Decree as part of a global settlement totaling $30,000,000 to fully resolve the Notice of Apparent Liability for Forfeiture and Order the Commission issued against TCM,[1] the Commission's Investigation into whether TCM violated the Commission's Lifeline program rules (Rules),[2] and the FCC's forfeiture penalty claims, as well as claims related to the Covered Conduct as defined and specified in the settlement between TCM and the U.S. Attorney's Office for the Southern District of New York (SDNY Settlement).

2. As part of the Universal Service Fund (USF), the Lifeline program assists qualified low-income consumers in obtaining the opportunities and security that phone service brings, including connecting to jobs, family members, and emergency services. The Lifeline program is administered by the Universal Service Administrative Company (USAC), which is responsible for, among other things, support calculation and disbursement payments for the Lifeline program. An ETC, like TCM, may receive $9.25 per month for each qualifying low-income consumer receiving Lifeline service (Basic Support), and up to an additional $25 per month if the qualifying low-income consumer resides on Tribal Lands.[3] Before receiving such support reimbursements, however, an ETC must meet stringent requirements under the Commission's Lifeline Rules.[4]

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[1] *Total Call Mobile, Inc.*, Notice of Apparent Liability for Forfeiture and Order, 31 FCC Rcd. 4191 (2016) (*TCM NAL*).

[2] Investigation means the investigation commenced by the Bureau in File No. EB-IHD-14-00017650, and the *TCM NAL*.

[3] *See* 47 CFR § 54.403(a); 47 CFR § 54.400(a), (e). *See also* 47 CFR § 54.409.

[4] *See* 47 CFR §§ 54.400–54.422.

3. In response to concerns about TCM's participation in the Lifeline program, the Enforcement Bureau's USF Strike Force conducted an extensive investigation into the company's compliance with the Commission's Rules, including whether TCM enrolled duplicate and ineligible consumers in the Lifeline program through the misuse of eligibility documents such as temporary Supplemental Nutrition Assistance Program (SNAP) cards, including enrolling "phantom" consumers who were created by using the identity information of an individual without the individual's consent, and the accuracy of the consumer data TCM provided in support of its USF reimbursement requests. In addition, the Commission's Wireline Competition Bureau (WCB) directed USAC to hold Lifeline disbursements to TCM beginning with the May 2016 data month.[5]

4. On April 7, 2016, the Commission issued the *TCM NAL* against TCM alleging violations of the Commission's Rules that govern the Lifeline program.[6] To settle this matter, as well as a civil False Claims Act matter with the U.S. Attorney's Office for the Southern District of New York, TCM agrees to pay $30,000,000 in connection with this global settlement, admits that it violated the Commission's Rules governing the Lifeline program, relinquishes its federal and state Eligible Telecommunications Carrier (ETC) designations, and agrees to no longer participate or seek to participate in the Lifeline program. Pursuant to this settlement agreement, TCM will withdraw and not pursue any objections presently before USAC and the Commission related to claims involving the $7,460,884 in Lifeline reimbursements held by USAC, including the Letter from Steve Augustino, Counsel for TCM, Kelley Drye & Warren, LLP, to Michelle Garber, USAC (May 9, 2016) and Total Call Mobile, Inc., NAL/Acct. No. 201632080004, Response to Paragraph 102 of the Notice of Apparent Liability for Forfeiture, FCC 16-44 (2016). The $7,460,884 shall be deemed to be part of the global settlement amount paid by TCM.

5. After reviewing the terms of the Consent Decree and evaluating the facts before us, we find that the public interest would be served by adopting the Consent Decree and terminating the referenced investigation of TCM.[7]

6. We do not set for hearing the question of TCM's basic qualifications to hold or obtain any Commission license or authorization, as TCM with this Consent Decree is agreeing to withdraw from, and not participate again in, the Lifeline program.

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[5] *Total Call Mobile, Inc.*, Order Directing Temporary Hold of Payments (DA 16-708) (June 22, 2016).

[6] *TCM NAL*.

[7] Investigation means the investigation commenced by the Bureau's USF Strike Force in File No. EB-IHD-14-00017212 and the *TCM NAL*.

7. Accordingly, **IT IS ORDERED** that, pursuant to Sections 4(i), and 503(b) of the Act[8] and the authority delegated by Sections 0.111 and 0.311 of the Rules,[9] the attached Consent Decree **IS ADOPTED** and its terms incorporated by reference.

8. **IT IS FURTHER ORDERED** that the above-captioned matter **IS TERMINATED** and the NAL and Order are **CANCELLED**.

9. **IT IS FURTHER ORDERED** that a copy of this Order and Consent Decree shall be sent by first class mail and certified mail, return receipt requested, to Yasunori Matsuda, Chief Executive Officer, Total Call Mobile, LLC, 1411 W. 190th Street, Gardena, CA 90248, to Patrick O'Donnell and Brita Stransberg, Harris, Wiltshire & Grannis, LLP, counsel for Total Call Mobile, Inc., 1919 M Street, NW, 8th Floor, Washington, DC. 20036, and to Steven A. Augustino, Kelley Drye & Warren LLP, Washington Harbour, Suite 400, 3050 K Street, NW, Washington, D.C. 20007.

FEDERAL COMMUNICATIONS COMMISSION

Travis LeBlanc
Chief
Enforcement Bureau

[8] 47 U.S.C. §§ 154(i), 503(b).

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Total Call Mobile, Inc.	)	File No.: EB-IHD-14-00017650
	)	NAL Acct. No.: 201632080004
	)	
	)	
	)	

CONSENT DECREE

1. The Enforcement Bureau of the Federal Communications Commission and Total Call Mobile, LLC (TCM),[1] by their authorized representatives, hereby enter into this Consent Decree for the purposes of terminating the Bureau's Notice of Apparent Liability for Forfeiture and Order and the Bureau's investigation, as defined below, into whether TCM violated Sections 54.405, 54.407, 54.409, and 54.410 of the Commission's rules governing the provision of Lifeline service to low-income consumers,[2] from at least November 2012 through April 2016.

2. On December 19, 2016, TCM, along with affiliated entities, entered into a Stipulation and Order of Settlement and Dismissal (the "SDNY Settlement") with the United States Attorney's Office for the Southern District of New York to resolve claims that TCM engaged in certain fraudulent conduct in connection with the Lifeline program and a *qui tam* action that was filed in the United States District Court for the Southern District of New York pursuant to the False Claims Act, as amended, 31 U.S.C. § 3729 *et seq.* (FCA).[3]

I. DEFINITIONS

3. For the purposes of this Consent Decree, the following definitions shall apply:

(a) "Act" means the Communications Act of 1934, as amended.[4]

(b) "Adopting Order" means an order of the Bureau adopting the terms of this Consent Decree without change, addition, deletion, or modification.

(c) "Basic Support" means Lifeline support of $9.25 per month for eligible Lifeline consumers.

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[1] On March 31, 2015, Total Call Mobile was re-organized as a limited liability corporation under the laws of Delaware. The FCC was notified of this *pro forma* transfer of control by letter dated April 30, 2015. *See Notification, pursuant to Section 63.24(f) of the Commission's Rules, of a pro forma transfer of control of Total Call Mobile, LLC which holds international Section 214 authority et al.*, File No. ITC-ASG-20150430-00114 (Apr. 30, 2015).

[2] *See* 47 CFR §§ 54.405, 54.407, 54.409, 54.410.

[3] The scope of the releases in the SDNY Settlement are specified in that agreement.

[4] 47 U.S.C. § 151, *et seq.*

(d) "Bureau" means the Enforcement Bureau of the Federal Communications Commission.

(e) "Commission" and "FCC" mean the Federal Communications Commission and all of its bureaus and offices.

(f) "Communications Laws" means collectively, the Act, the Rules, and the published and promulgated orders and decisions of the Commission to which TCM is subject by virtue of its business activities, including but not limited to the Lifeline Rules.

(g) "SDNY" means the United States Attorney's Office for the Southern District of New York.

(h) "Effective Date" means the date by which both the Bureau and TCM have signed the Consent Decree and the U.S. District Court for the Southern District of New York has approved the proposed Stipulation and Order of Dismissal, whichever is later.

(i) "ETC" means an eligible telecommunications carrier designated under, or operating pursuant to, Section 214(e) of the Communications Act, as amended, 47 U.S.C. § 214(e), as eligible to offer and receive support for one or more services that are supported by the federal universal support mechanisms.

(j) "Investigation" means the investigation commenced by the Bureau in File No. EB-IHD-14-00017650, and in *Total Call Mobile, Inc.*, Notice of Apparent Liability for Forfeiture and Order, 31 FCC Rcd. 4191 (2016) (*TCM NAL*) regarding whether TCM violated the Lifeline Rules.

(k) "Lifeline Rules" means Title 47, Code of Federal Regulations, Sections 54.400-54.422, Section 254 of the Act, and Commission orders related to the provision of Lifeline service.

(l) "Monies Held" means the Lifeline support payments to Total Call Mobile temporarily held by USAC pursuant to the notice provided to the company on April 8, 2016, and order issued by the Wireline Competition Bureau dated June 22, 2016 (DA 16-708).

(m) "NLAD" means the National Lifeline Accountability Database that ETCs are required to use, unless otherwise provided, pursuant to 47 CFR § 54.404. NLAD is a third-party independent verification system used by the Universal Service Administrative Company that was designed to identify and deny the enrollment of any potential intra-company duplicate Lifeline consumers.

(n) "Parties" means TCM and the Bureau, each of which is a "Party."

(o) "Person" shall have the same meaning defined in Section 153(39) of the Communications Act, as amended, 47 U.S.C. § 153(39).

(p) "Rules" means the Commission's regulations found in Title 47 of the Code of Federal Regulations.

(q) "TCM" or "Company" means Total Call Mobile, LLC, and its predecessors in interest and successors in interest, including Total Call Mobile, Inc.

(r) "USAC" means the Universal Service Administrative Company, which serves as the administrator for the federal Universal Service Fund.[5]

II. BACKGROUND

3. Lifeline is part of the federal Universal Service Fund (USF or the Fund) and helps qualified consumers have the opportunities and security that essential communications service brings, including being able to connect to jobs, family members, and emergency services.[6] Lifeline service is provided by ETCs designated pursuant to the Act.[7] An ETC may seek and receive reimbursement from the USF for revenues it forgoes in providing the discounted services to eligible consumers in accordance with the Rules. Section 54.403(a) of the Lifeline Rules specifies that an ETC may receive $9.25 per month in Basic Support for each qualifying low-income consumer receiving Lifeline service.[8]

4. The Lifeline Rules establish explicit requirements that ETCs must meet to receive Lifeline support reimbursements.[9] Section 54.407(a) of the Lifeline Rules provides that "[u]niversal service support for providing Lifeline shall be provided to an eligible telecommunications carrier based on the number of actual qualifying low-income consumers it services[.]"[10]

5. The Lifeline Rules prohibit an ETC from seeking reimbursement for providing Lifeline service to a consumer unless the ETC has confirmed the consumer's eligibility to receive Lifeline service.[11] Section 54.410 requires an ETC to receive a certification of eligibility from a subscriber demonstrating that the consumer meets the income-based or program-based eligibility criteria for receiving Lifeline service prior to seeking reimbursement from the USF. Section 54.410(a) further

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[5] *See* 47 CFR § 54.701.

[6] *See Lifeline and Link Up Reform and Modernization et al., Report and Order and Further Notice of Proposed Rulemaking*, WC Dkt. No. 11-42 *et al.*, FCC Rcd 6656, 6662-66, paras. 11-17 (2012) (*2012 Lifeline Reform Order*); *see also* 47 CFR §§ 54.400–54.422.

[7] *See* 47 U.S.C. § 254(e) (providing that "only an eligible telecommunications carrier designated under section 214(e) of this title shall be eligible to receive specific Federal universal service support"); *see also* 47 U.S.C. § 214(e) (prescribing the method by which carriers are designated as ETCs).

[8] *See* 47 CFR § 54.403(a).

[9] *See* 47 CFR §§ 54.400–54.422.

[10] *See* 47 CFR § 54.407(a).

[11] *See* 47 CFR § 54.410(b), (c).

requires ETCs to "implement policies and procedures for ensuring that their Lifeline subscribers are eligible to receive Lifeline services."[12]

6. ETCs that provide qualifying low-income consumers with Lifeline discounts file a Form 497 with USAC to request reimbursement for providing service at the discounted rates. Section 54.407(d) provides that an ETC may receive reimbursement from the Fund if the ETC certifies as part of its reimbursement request that it is in compliance with the Lifeline Rules and, to the extent required under that subpart, has obtained valid certifications for each consumer for whom the ETC seeks reimbursement.[13] An ETC may revise its Form 497 data within 12 months after the data is submitted.[14]

7. TCM is an ETC designated to provide wireless Lifeline service in at least 19 states and territories. TCM offered eligible low-income Lifeline consumers a plan that allowed it to seek reimbursements from the Fund. TCM solicited and enrolled consumers for its Lifeline-supported services by contracting with master agents, who were based throughout the United States. These TCM master agents in turn recruited individual TCM sales agents, who performed the individual Lifeline enrollments and were supervised by TCM master agents; since early 2014, enrollments performed by TCM sales agents were reviewed by TCM in real time.

8. In response to a referral made by the Commission's Wireline Competition Bureau and USAC, the Bureau's USF Strike Force (Strike Force) initiated and conducted the Investigation of TCM's Lifeline consumer enrollment practices.

9. TCM relied primarily on in-person sales events to enroll consumers in the Lifeline program. TCM solicited and enrolled consumers by contracting with several distributors based throughout the country, referred to as "master agents," who in turn hired individual "field agents" to engage in face-to-face marketing at public events and spaces. The field agents collected the consumer's information and performed individual enrollments. TCM paid the master agents based in part on the number of subscribers successfully enrolled, and the master agents in turn paid their field agents primarily or exclusively on a commission basis.

10. TCM received and reviewed the vast majority of its Lifeline applications electronically. Using tablet computers, field agents were required to enter a consumer's demographic information (*e.g.*, name, address, date of birth, last four digits of Social Security number) and capture images of the consumer's proof of identification and proof of eligibility (*e.g.*, Supplemental Nutrition Assistance Program (SNAP) card, Medicaid card). TCM had electronic access to the documentation, information, and data entered during the enrollment process, and was responsible for verifying the eligibility of Lifeline applicants.

11. For much of the time from September 2012 to May 2016, TCM failed to adequately screen and train the field agents who acted on the company's behalf. Although TCM provided training to its master agents, from September 2012 until late 2014, TCM relied on the master agents to train field

[12] *See* 47 CFR § 54.410(a).

[13] *See* 47 CFR § 54.407(d).

[14] *See 2012 Lifeline Reform Order*, 27 FCC Rcd at 6788, para. 305.

agents and did not ensure that such training was provided. TCM started to directly train field agents thereafter.

12. TCM failed to implement effective policies and procedures to ensure the eligibility of the subscribers for whom TCM requested reimbursement for Lifeline discounts, as required by Lifeline Rules. Although TCM had certain policies and procedures that improved over time, TCM did not effectively monitor compliance with these policies and procedures and failed to prevent the enrollment of ineligible individuals. For much of the time from September 2012 to May 2016, TCM allocated insufficient staff and resources to verifying the eligibility of Lifeline subscribers. For example, pursuant to TCM's 2013 business plan, one staff member was expected to review the eligibility of 6,000 prospective Lifeline customers each month.

13. Hundreds of TCM field agents engaged in fraudulent practices to enroll consumers who were duplicate subscribers[15] or who were otherwise not eligible for the Lifeline program. For example:

a. Certain field agents repeatedly used the same benefit program eligibility proof to enroll multiple consumers. Agents frequently enrolled several different individuals by submitting an image of the same improperly obtained program eligibility card or, in some instances, a fake program eligibility card. Field agents relied on temporary SNAP cards to enroll consumers because these cards did not include the actual benefit recipient's name. Although TCM and Locus managers received numerous reports that field agents were relying on the same program eligibility card repeatedly, they failed to put in place adequate systems and procedures to prevent this practice for much of the time from September 2012 to May 2016.

b. Certain field agents slightly altered the way in which a subscriber's demographic information was input to avoid having TCM identify the application as a duplicate. TCM knew that field agents developed ways to manipulate the consumer's data to bypass the limited automated duplicate checks in place, and failed to put in place an adequate system for screening out duplicate subscribers. TCM enhanced its duplicate check system during the latter portion of the time from September 2012 to May 2016, but some duplicate subscribers continued to be enrolled.

c. Certain field agents tampered with identification or program eligibility cards, and intentionally transmitted blurry or partial images of the documentation, to try to conceal the fact that the information on the documentation did not match the subscriber's actual name or the other information on the Lifeline application. TCM enrolled individuals in the Lifeline program and sought reimbursement for discounts provided to them notwithstanding clear legibility issues with the proof submitted.

[15] A "duplicate subscriber" refers to an individual enrolled to receive Lifeline services from TCM even though the individual or someone in the individual's household also received Lifeline services from TCM, in violation of the one-benefit-per-household requirement.

d. Certain field agents provided their own signature, printed their own name, or wrote a straight or curvy line where the prospective subscriber's signature was supposed to appear on Lifeline applications. TCM enrolled individuals in the Lifeline program and sought reimbursement for discounts provided to them even though the field agents had completed the required customer certification instead of the actual consumer.

e. Certain field agents submitted false consumer addresses and social security numbers to enroll duplicate or otherwise ineligible subscribers. TCM failed to take sufficient actions to identify this false information during its review, and enrolled these individuals in the Lifeline program and sought reimbursement for discounts provided to them.

14. TCM failed to put in place effective mechanisms to oversee the conduct of field agents and detect and prevent field agent abuses. Further, during much of the time from September 2012 to May 2016, even when managers learned that field agents were using the same program eligibility card repeatedly or engaging in some other type of improper practice, TCM often allowed the field agent to continue to enroll subscribers. TCM rarely took corrective actions against field agents who engaged in improper conduct until the latter portion of the time from September 2012 to May 2016, when it enhanced its oversight of field agent practices and deactivated a number of field agents.

15. During the time from September 2012 to May 2016, TCM submitted hundreds of monthly reimbursement requests on Form 497s to USAC that listed the purported total number of qualifying low-income Lifeline subscribers served and the total reimbursement claimed for the month. In each Form 497, TCM certified that the company was in compliance with all of the Lifeline rules and that it had obtained valid certification forms for each subscriber for whom TCM sought reimbursement. At the time that TCM submitted many of these Form 497s, TCM knew that its policies and procedures for reviewing Lifeline applications, verifying consumer eligibility, conducting duplicate checks, and detecting duplicate subscribers were deficient. Although TCM revised some of its Form 497s to correct errors or remove subscribers who were subsequently determined to be potentially ineligible, these revised forms still included consumers who did not meet the Lifeline eligibility criteria.

16. TCM sought and received reimbursement for tens of thousands of consumers who did not meet the Lifeline eligibility requirements.

17. On April 7, 2016, based upon these violations of the Lifeline Rules, the Commission released the *TCM NAL* charging TCM with apparently violating Sections 54.405, 54.407, 54.409, and 54.410 of the Lifeline Rules. [16]

[16] *See Total Call Mobile, Inc.*, Notice of Apparent Liability for Forfeiture and Order, 31 FCC Rcd. 4191 paras. 6, 73, 83, 103 (2016).

18. On April 8, 2016, USAC issued a letter to TCM notifying it of the impending hold of all Lifeline Program funding to the Company in light of the evidence outlined in the *TCM NAL* and requiring the Company to provide sufficient documentation demonstrating its compliance with the Lifeline Rules.[17] On May 9, 2016, TCM submitted a response to USAC objecting to the impending hold of Lifeline funding.[18] Also on May 9, 2016, as directed in Paragraph 102 of the *TCM NAL*, TCM submitted a report explaining why the Commission should not take certain actions, including suspension of all Lifeline reimbursements to TCM.[19] On June 1, 2016, the Wireline Competition Bureau issued a letter to TCM seeking additional documentation and information relating to TCM's Paragraph 102 Response. TCM responded to that letter on June 13, 2016, June 22, 2016, and June 27, 2016. TCM responded to a supplemental letter from the Wireline Competition Bureau, dated June 30, 2016, with responses on July 6, 2016, July 8, 2016, July 13, 2016 and July 22, 2016.

19. On June 22, 2016, the Wireline Competition Bureau issued a temporary suspension of TCM's USF reimbursements, pending its review of TCM's responses to the WCB's request(s) for information (*WCB Temporary Hold Order*).[20] On July 22, 2016, TCM filed a Petition for Reconsideration of the *WCB Temporary Hold Order*, which remains pending. TCM responded to the *TCM NAL* on July 5, 2016.[21]

20. The agreed final amount of Lifeline funding held by USAC is $7,460,884. In the event that there are any additional Monies Held as a result of post-settlement filings or adjustments by TCM, TCM waives its right to the additional Monies Held.

21. The parties negotiated the following terms and conditions of settlement and hereby enter into this Consent Decree as provided below.

III. TERMS OF AGREEMENT

22. **Adopting Order**. The provisions of this Consent Decree shall be incorporated by the Bureau in an Adopting Order.

23. **Jurisdiction**. For purposes of this Consent Decree, TCM agrees that the Bureau has jurisdiction over it and the matters contained in this Consent Decree and has the authority to enter into and adopt this Consent Decree.

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[17] *See* Letter from USAC to Mr. Hideki Kato, President, Total Call Mobile, Inc. (Apr. 8, 2015).

[18] Letter from Steve Augustino, Counsel for TCM, Kelley Drye & Warren, LLP, to Michelle Garber, USAC (May 9, 2016).

[19] *Total Call Mobile, Inc.*, NAL/Acct. No. 201632080004, Response to Paragraph 102 of the Notice of Apparent Liability for Forfeiture, FCC 16-44 (May 9, 2016) (*TCM Paragraph 102 Response*).

[20] *Total Call Mobile, Inc.*, Order Directing Temporary Hold of Payments, DA 16-708 (Wireline Comp. Bur., June 22, 2016).

[21] *See* Total Call Mobile, LLC's Response to the Notice of Apparent Liability for Forfeiture (July 5, 2016) (*TCM NAL Response*).

24. **Effective Date**. The Parties agree that this Consent Decree shall become effective on the Effective Date as defined herein. As of the Effective Date, the Parties agree that the Adopting Order and this Consent Decree shall have the same force and effect as any other order adopted by the Commission. Any violation of the Adopting Order or of the terms of this Consent Decree shall constitute a separate violation of a Commission order, entitling the Commission to exercise any rights and remedies attendant to the enforcement of a Commission order. If the Bureau determines that TCM made any material misrepresentation or material omission relevant to the resolution of this Investigation, the Bureau retains the right to seek modification of this Consent Decree.

25. **Termination of Investigation**. In express reliance on the covenants and representations in this Consent Decree and to avoid further expenditure of public resources, the Bureau agrees to terminate the Investigation and resolve the *TCM NAL*. In consideration for the termination of the Investigation, TCM agrees to the terms, conditions, and procedures contained herein. The Bureau further agrees that, in the absence of new material evidence, it will not use the facts developed in the Investigation through the Effective Date, or the existence of this Consent Decree, to institute, on its own motion, any new proceeding, formal or informal, or take any action on its own motion against TCM concerning the matters that were the subject of the Investigation. This Consent Decree is contingent upon court approval of the SDNY Settlement, but otherwise does not terminate any other investigations that have been or might be conducted by other law enforcement agencies or offices.

26. **Admission of Liability**. TCM admits for the purpose of this Consent Decree and for the Commission's civil enforcement purposes, and in express reliance on the provisions of paragraph 25 herein, that its actions in paragraphs 9 through 16, and that were the subject of the *TCM NAL* violated Sections 54.405, 54.407, 54.409, and 54.410 of the Commission's Rules.[22]

27. **Relinquishment of License**. In consideration for the termination of the Investigation, and in express reliance on the provisions of paragraph 25 herein, TCM agrees to: (1) transfer its Lifeline customers and cease providing Lifeline service on or before December 31, 2016; (2) not participate in the Lifeline program after December 31, 2016; (3) no longer apply for or receive Lifeline universal service support on or after December 31, 2016; (4) relinquish its ETC designation from the Commission and all respective ETC designations TCM has received from all states and territories of the United States, and withdraw any applications TCM submitted for ETC designation, on or before December 31, 2016; and (5) not reapply for ETC designations from the Commission or any state or territory of the United States after the Effective Date of this Agreement. TCM shall submit copies of all requests to relinquish its ETC designations and withdraw its applications for ETC designation to Loyaan Egal, Director, Strike Force, Enforcement Bureau, Federal Communications Commission, 445 12th Street, SW, Washington DC 20554, with copies submitted electronically to Loyaan Egal at Loyaan.Egal@fcc.gov, to Rakesh Patel

[22] *See* 47 CFR §§ 54.405, 54.407, 54.409, 54.410.

at Rakesh.Patel@fcc.gov, to David M. Sobotkin at David.Sobotkin@fcc.gov, and to Dangkhoa Nguyen at Dangkhoa.Nguyen@fcc.gov.

28. **Section 208 Complaints; Subsequent Investigations**. Nothing in this Consent Decree shall prevent the Commission or its delegated authority from adjudicating complaints filed pursuant to Section 208 of the Act[23] against TCM or its affiliates for alleged violations of the Act, or for any other type of alleged misconduct, regardless of when such misconduct took place. The Commission's adjudication of any such complaint will be based solely on the record developed in that proceeding. Except as expressly provided in this Consent Decree, this Consent Decree shall not prevent the Commission from investigating new evidence of noncompliance by TCM with the Communications Laws.

29. **Settlement Amount**. TCM agrees to a Global Settlement Amount with the FCC and SDNY with a value of $30,000,000.00 (Global Settlement Amount) to fully resolve the *TCM NAL*, the Investigation, and the FCC's forfeiture penalty claims, as well as claims related to the Covered Conduct as defined and specified in the SDNY Settlement. The Global Settlement Amount addresses the loss to the Fund. A percentage of the Global Settlement Amount will be paid to the Relator in the *qui tam* action to resolve the Relator's claim to a portion of the Global Settlement Amount pursuant to 31 U.S.C. § 3730(d)(1).

a. In furtherance of the foregoing, TCM will withdraw its Petition for Reconsideration and not pursue any objections presently before USAC and the Commission related to claims involving the $7,460,884 in Lifeline reimbursements held by USAC, including the Letter from Steve Augustino, Counsel for TCM, Kelley Drye & Warren, LLP, to Michelle Garber, USAC (May 9, 2016) and Total Call Mobile, Inc., NAL/Acct. No. 201632080004, Response to Paragraph 102 of the Notice of Apparent Liability for Forfeiture, FCC 16-44 (2016). The $7,460,884 shall be deemed to be part of the Global Settlement Amount paid by TCM and shall be deemed part of the amount repaid to the Fund.

30. **Waivers**. As of the Effective Date, TCM waives any and all rights it may have to seek administrative or judicial reconsideration, review, appeal or stay, or to otherwise challenge or contest the validity of this Consent Decree and the Adopting Order. TCM shall retain the right to challenge Commission interpretation of the Consent Decree or any terms contained herein. If either Party (or the United States on behalf of the Commission) brings a judicial action to enforce the terms of the Consent Decree or the Adopting Order, neither TCM nor the Commission shall contest the validity of the Consent Decree or the Adopting Order, and TCM shall waive any statutory right to a trial *de novo*. TCM hereby

[23] 47 U.S.C. § 208.

agrees to waive any claims it may otherwise have under the Equal Access to Justice Act[24] relating to the matters addressed in this Consent Decree.

31. **Severability**. The Parties agree that if any of the provisions of the Consent Decree shall be held unenforceable by any court of competent jurisdiction, such unenforceability shall not render unenforceable the entire Consent Decree, but rather the entire Consent Decree shall be construed as if not containing the particular unenforceable provision or provisions, and the rights and obligations of the Parties shall be construed and enforced accordingly.

32. **Invalidity**. In the event that this Consent Decree in its entirety is rendered invalid by any court of competent jurisdiction, it shall become null and void and may not be used in any manner in any legal proceeding.

33. **Subsequent Rule or Order**. The Parties agree that if any provision of the Consent Decree conflicts with any subsequent Rule or Order adopted by the Commission (except an Order specifically intended to revise the terms of this Consent Decree to which TCM does not expressly consent) that provision will be superseded by such Rule or Order.

34. **Successors and Assigns**. TCM agrees that the provisions of this Consent Decree shall be binding on its successors, assigns, and transferees.

35. **Final Settlement**. The Parties agree and acknowledge that this Consent Decree shall constitute a final settlement between the Parties with respect to the Investigation. In furtherance of settlement, and subject to the other terms of this Consent Decree, the Parties agree as follows:

a. This Consent Decree is contingent upon court approval of the SDNY Settlement, but, otherwise, does not settle any other investigations that have been or might be conducted by other law enforcement agencies or offices;

b. TCM will withdraw its Petition for Reconsideration and not pursue any other objections presently before USAC and the Commission related to claims involving the $7,460,884 in Lifeline reimbursements held by USAC, including the Letter from Steve Augustino, Counsel for TCM, Kelley Drye & Warren, LLP, to Michelle Garber, USAC (May 9, 2016) and *Total Call Mobile, Inc.*, NAL/Acct. No. 201632080004, Response to Paragraph 102 of the Notice of Apparent Liability for Forfeiture, FCC 16-44 (2016); and

c. TCM agrees not to initiate any additional actions or proceedings, including before any court or tribunal, seeking payments for Lifeline services that are the subject of the Investigation.

36. **Modifications**. This Consent Decree cannot be modified without the advance written consent of both Parties.

[24] *See* 5 U.S.C. § 504; 47 CFR §§ 1.1501–1.1530.

37. **Paragraph Headings**. The headings of the paragraphs in this Consent Decree are inserted for convenience only and are not intended to affect the meaning or interpretation of this Consent Decree.

38. **Authorized Representative**. Each Party represents and warrants to the other that it has full power and authority to enter into this Consent Decree. Each person signing this Consent Decree on behalf of a Party hereby represents that he or she is fully authorized by the Party to execute this Consent Decree and to bind the Party to its terms and conditions.

39. **Counterparts**. This Consent Decree may be signed in counterpart (including electronically or by facsimile). Each counterpart, when executed and delivered, shall be an original, and all of the counterparts together shall constitute one and the same fully executed instrument.

_____

Travis LeBlanc

Chief

Enforcement Bureau

_____

Date

_____

Yasunori Matsuda

Chief Executive Officer

Total Call Mobile, LLC

_____

Date

TESTIMONY OF FCC COMMISSIONER AJIT PAI
BEFORE THE SUBCOMMITTEE ON COMMUNICATIONS AND TECHNOLOGY
OF THE UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE

"OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION"

JULY 12, 2016

Chairman Walden, Ranking Member Eshoo, and Members of the Subcommittee, thank you for giving me the opportunity to testify this morning. Since 2012, it has been an honor to work with you on a wide variety of issues, from freeing up more spectrum for consumer use to encouraging the deployment of high-speed broadband.

I want to begin by expressing my gratitude to the Members of this Subcommittee for the bipartisan leadership you have shown on a number of important matters, particularly those involving public safety.

The Kari's Law Act of 2016 is one such example. Dialing 911 should always connect someone in need with emergency personnel who can help. But this doesn't always happen. In some hotels, offices, college dorms, and other large buildings, calls to 911 won't go through because the multi-line telephone systems (MLTS) in use in those facilities require callers to dial a "9" before placing the call. The Kari's Law Act of 2016 would help fix this problem by requiring MLTS systems to have a default configuration that allows direct 911 calling.

I want to thank the Subcommittee for holding a hearing on the Kari's Law Act three months ago. I can say that your efforts, along with the courageous work of Hank Hunt, Kari's father, and many others, are making a difference. Indeed, just one month after your hearing, this legislation passed the House. I hope the Senate moves quickly to pass the companion legislation introduced by Senators Deb Fischer, Amy Klobuchar, John Cornyn, Ted Cruz, and Brian Schatz, and that this common-sense, bipartisan public safety measure soon becomes law.

I would like to focus the rest of my testimony on two other important topics: the FCC's set-top box proposal and the waste, fraud, and abuse that have plagued the FCC's Lifeline program.

Set-Top Box.—I am deeply concerned about the FCC's proposed set-top box rules. The public input submitted to the agency in recent weeks makes clear that I am not alone. During my time at the Commission, I've never seen such a large and diverse coalition come together with respect to any other issue. Chairman Wheeler's proposal has united content creators and cable operators. It has brought together Democrats and Republicans, conservatives, moderates, and liberals. And it has led to civil rights organizations,[1] privacy advocates,[2] environmental organizations,[3] and free-market proponents[4] making common cause—all in opposition to the FCC's proposal. The breadth and depth of opposition signal how badly the FCC's scheme misses the mark. I cannot put it any better than Commissioner Rosenworcel did

[1] *See, e.g.*, Letter from Brent Wilkes, National Executive Director, League of United Latin American Citizens, to the Honorable Tom Wheeler, Chairman, FCC, MB Docket No. 15–64 (Feb. 17, 2016).

[2] *See, e.g.*, Electronic Privacy Information Center Comments, MB Docket No. 16–42 and CS Docket No. 97–80 (Apr. 22, 2016).

[3] *See, e.g.*, Noah Horowitz, *FCC Proposal Could Undermine Efforts to Bring Down National Set-Top Box Energy Use*, NRDC (May 04, 2016), https://www.nrdc.org/experts/noah-horowitz/fcc-proposal-could-undermine-efforts-bring-down-national-set-top-box-energy (last visited July 7, 2016).

[4] *See, e.g.*, TechFreedom and Competitive Enterprise Institute Comments, MB Docket No. 16–42 and CS Docket No. 97–80 (Apr. 22, 2016).

last month when she said that the FCC's proposal has "real flaws" and "[w]e need to find another way forward."[5]

What should that way forward look like?

First, it must protect the intellectual property of content creators. Currently, video programmers use licensing and contractual agreements with cable operators to protect and control their content. But as Senate Minority Leader Harry Reid has pointed out, under the FCC's proposal, it is "unclear what . . . duty [third-party set-top box providers] would have to protect programming content or otherwise comply with the licensing agreements" and whether "programmers would have any ability to enforce these agreements directly with the third-party providers."[6] This, according to Senator Dianne Feinstein, raises concerns about whether "third-parties could create devices that enable piracy and hinder the ability of content providers to control their creative work."[7] Senator Bill Nelson, the Ranking Member of the Senate Commerce Committee, has said that FCC rules should not "be the means by which third parties gain, for their own commercial advantage, the ability to alter, add to, or interfere with programming provided by content providers."[8] But unfortunately, that's just what the FCC's proposed rules would do. They would facilitate piracy. They would allow third-party set-top box manufacturers to insert their own advertising into programmers' content. And they would allow those same manufacturers to remove advertising from that content—all without the programmers' consent.

Relatedly, we must pay special attention to the concerns that have been raised about the impact of the FCC's proposal on minority programmers. As Reverend Jesse Jackson has put it, the FCC's proposed rules would allow third-party set-top box manufacturers to "pull networks apart, ignore copyright protections and dismantle the local and national advertising streams that have traditionally supported high quality, multicultural content."[9] He continued, "[t]he result [would be] a deep threat to the entire creative ecosystem, and especially smaller, independent and diverse networks and programmers that often lack the deep pocket resources to weather this type of transition."[10] Moreover, the FCC's proposal would allow third-party set-top box manufacturers to rearrange cable operators' channel lineups, to the detriment of minority programmers. This digital redlining shouldn't be permitted.

That's why Representative Yvette Clarke of this Subcommittee and many other members of the Congressional Black Caucus have called for the FCC to stop pushing this proposal until it analyzes the "impact of the proposed rules on diversity of programming, [and] independent and minority television programming."[11] A similar request has been made by major civil rights organizations, including the League of United Latin American Citizens (LULAC) and the National Urban League.[12] The FCC should listen to what these voices are saying.

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[5] David Shephardson, *U.S. Cable Industry Proposes Allowing Consumers to Scrap Set-Top Boxes*, REUTERS (June 17, 2016), http://www.reuters.com/article/us-fcc-tv-regulations-idUSKCN0Z32DK.

[6] Letter from Senator Harry Reid to the Honorable Tom Wheeler, Chairman, FCC (June 14, 2016).

[7] Letter from Senator Dianne Feinstein to the Honorable Tom Wheeler, Chairman, FCC (May 25, 2016).

[8] Letter from Senator Bill Nelson to the Honorable Tom Wheeler, Chairman, FCC (Feb. 12, 2016).

[9] Jesse L. Jackson, *Future of TV Must Not Sacrifice Minority Media: Jesse Jackson*, USA TODAY (June 6, 2016), http://www.usatoday.com/story/opinion/2016/06/06/fcc-set-top-box-proposal-minority-impact-opposition-media-diversity-column/85301308l.

[10] *Id.*

[11] Letter from Representative Yvette Clarke et al. to the Honorable Tom Wheeler, Chairman, FCC (Apr. 22, 2016).

[12] *See* Letter from Marc H. Morial, President and CEO, National Urban League et al. to the Honorable Tom Wheeler, Chairman, FCC, MB Docket No. 16–42, CS Docket No. 97–80, and MB Docket No. 16–41 (Mar. 21, 2016).

Second, we must address the special challenges faced by small video providers. The record makes clear that it would be very expensive for all video providers to comply with the Commission's proposed rules. And as is so often the case, these rules would have a disproportionate impact on small companies. Indeed, the American Cable Association has stated that the FCC's proposed rules would force over 200 small cable operators to either go out of business or stop offering video service.[13] And the message from small telecommunications carriers that are in the video business has been similar.[14] Small wonder, then, that Capitol Hill is also concerned. A bipartisan group of 61 U.S. Congressmen, led by Representative Kevin Cramer, recently told the Commission that it is "concerned the proposal threatens the economic welfare of small pay-TV companies providing both vital communications services to rural areas and competitive alternatives to consumers in urban markets."[15] This concern was reiterated by another bipartisan group of ten U.S. Senators who stressed that "[s]mall providers will not be able to afford the costs that could be associated with building new architecture to comply with the proposed rule."[16]

The impact of the FCC's proposed rules would thus be particularly severe for rural Americans because they are disproportionately served by smaller operators. They will be left with fewer choices for video service. Moreover, the FCC's rules will hamper rural broadband deployment as small operators devote limited funds to complying with the FCC's set-top box rules rather than delivering better, faster, and cheaper Internet access.

Third, we must protect Americans' privacy. Senate Minority Leader Harry Reid has pointed out that many third-party manufacturers will find "real value . . . not in producing or selling the [set-top] box but in the data that the box will collect."[17] That is why Senator Patrick Leahy, Ranking Member of the Senate Judiciary Committee, has stressed that the "same federal privacy protections and enforcement mechanisms that apply to proprietary set-top boxes today should apply to third-party navigation systems as well."[18] Unfortunately, the FCC's proposal fails this basic test. There should not be one set of privacy rules for cable operators' set-top boxes and another for third-party boxes. There should not be one enforcement mechanism for cable operators' set-top boxes and another for third-party boxes. The regulatory playing field should be level. *All* customers should have the same privacy protections.

Fourth, we must embrace the technology of the future rather than cling to the hardware of the past. I don't believe that the American people want more set-top boxes in their homes. But that's precisely what the FCC's plan would produce. To comply with the proposed rules, video providers would likely place a new gateway device into each subscriber's home to join the set-top box or boxes that are already there. Thus, the FCC's proposal would shackle us to an old technology that nobody seems to want. Echoing the sentiments of Senator Nelson, I, and millions of others, "long for the day when the clunky set-top box fades away."[19]

We need to focus on the future. Our goal should not be to have more boxes. Nor should it be to

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[13] *ACA Applauds Senate Letter Asking FCC to Press Pause on Set-Top Box Proceeding*, AMERICAN CABLE ASSOCIATION (May 27, 2016), http://www.americancable.org/node/5736 (last visited July 7, 2016).

[14] *See generally* NTCA–The Rural Broadband Association Comments, MB Docket No. 16–42 and CS Docket No. 97–80 (Apr. 22, 2016); WTA–Advocates for Rural Broadband Comments, MB Docket No. 16–42 and CS Docket No. 97–80 (Apr. 22, 2016).

[15] Letter from Representative Kevin Cramer et al. to the Honorable Tom Wheeler, Chairman, FCC (May 5, 2016).

[16] Letter from Senator Steve Daines et al. to the Honorable Tom Wheeler, Chairman, FCC (May 26, 2016).

[17] *Supra* note 6.

[18] Letter from Senator Patrick Leahy to the Honorable Tom Wheeler, Chairman, FCC (May 26, 2016).

[19] *Supra* note 8.

"unlock the box." It should be to get rid of the set-top box altogether. And that goal is now within our grasp. Americans are increasingly accessing video programming through apps. And with an app, there is no need to have a set-top box. So instead of paying a monthly fee to rent a box from a cable operator, your smartphone, tablet, or smart television can be your navigation device.

I believe that the FCC should welcome and encourage the market's movement in the direction of apps. That's why I thought that the Commission's Notice of Proposed Rulemaking should have given equal and fair treatment to the app-based solution set forth by the FCC's Downloadable Security Technology Advisory Committee, rather than dismissing it in three cursory and critical paragraphs. And that's why I note with interest the recent industry proposal that embraces an app-based approach. My office is currently reviewing that proposal and meeting with a wide range of stakeholders to see what they think about it. I look forward to hearing the views of the Members of this Subcommittee on this alternative proposal, too.

Lifeline Abuse.—The FCC must be vigilant in stopping abuse of the Universal Service Fund. Recall that this program is funded by a tax on the phone bills that consumers pay each month. That tax is now at 17.9%, nearly double what it was in January 2009. Hard-working Americans deserve to know that the money they contribute each month to the Fund is not wasted or put to fraudulent use. So I applaud the decision of House Energy and Commerce Committee Chairman Fred Upton to launch an investigation into the waste, fraud, and abuse in the Lifeline program.

Unfortunately, the Commission's recent investigation of Total Call Mobile revealed much about the dubious practices of many wireless resellers. We learned, for example, how Total Call Mobile's sales agents repeatedly registered duplicate subscribers (that is, individuals receiving multiple subsidies) and used fake Social Security numbers to register duplicate subscribers—all resulting in the Universal Service Administrative Company (USAC) finding 32,498 enrolled Lifeline duplicates. We learned how Total Call Mobile's sales agents repeatedly overrode the safeguards of the National Lifeline Accountability Database (NLAD)—abuse so far-reaching that at one point, 99.8% of Total Call Mobile's new subscribers were a result of overrides. We also learned that Total Call Mobile was not alone. Its sales agents testified that they worked side-by-side with sales agents and supervisors who worked at various points with other Lifeline wireless resellers.

After the revelations of the Total Call Mobile case, I began investigating the effectiveness of our federal safeguards. What I have found so far is disturbing.

Some background. Duplicate subscribers have long plagued Lifeline. To combat this problem, the FCC in 2012 prohibited a single household from obtaining more than one Lifeline subscription. It also established the NLAD. Administered by the USAC at the FCC's direction, the NLAD is designed to help carriers identify and prevent duplicate claims for Lifeline service. But is it really stopping such duplicate claims?

Although my investigation is still ongoing, initial results suggest that American taxpayers should be concerned. The extent of waste, fraud, and abuse in the program appears greater than I imagined.

First, USAC explained that the NLAD determines whether a Lifeline subscription would duplicate another at that same address. But wireless resellers may override a duplicate determination, called an independent economic household (IEH) override, and may do so without USAC oversight. An applicant (or, more likely, an unscrupulous wireless reseller) need only check a box. USAC's data reveal that wireless resellers enrolled 4,291,647 subscribers using the IEH override process since October 2014. That's more than 35.3% of all subscribers enrolled in NLAD-participating states during that period. That's more than the population of the State of Oregon. And the annual price to the taxpayer is steep—about $476 million.

Second, USAC reported that at least 16 other major Lifeline wireless resellers have used similar tactics as Total Call Mobile. I asked USAC whether these wireless resellers enrolled duplicate

subscribers, and indeed they did. Between October 2014 and May 2015, USAC discovered 213,283 duplicates among these wireless resellers. One year of service for these duplicates costs taxpayers almost $23.7 million.

Third, USAC explained that the NLAD does not prevent wireless resellers from requesting and receiving federal subsidies for subscribers who are not enrolled in the NLAD. In other words, a wireless reseller may seek federal funds for phantom subscribers—subscribers who aren't subject to federal safeguards at all—and can get away with it unless they're caught after the fact. And in a 16-state sample, these wireless resellers exploited that loophole 460,032 times, costing taxpayers almost $4.3 million.

Fourth, USAC explained that the NLAD verifies the identity of an applicant using a third-party identity verification (TPIV) process in which an applicant's first name, last name, date of birth, and the last four digits of his or her Social Security number are matched against official records. But wireless resellers can override that safeguard, and before February 2, 2015, they did so without any federal oversight. From October 2014 through February 2015, 10 wireless resellers overrode federal safeguards more than half the time, with seven—like Total Call Mobile—overriding the TPIV process more than 90% of the time. Roughly one-third of applicants enrolled by wireless resellers during that period, or 821,482 subscribers, were enrolled using a TPIV override.

On February 2, 2015, USAC implemented a new process for TPIV overrides. Now, a wireless reseller is supposed to review the appropriate documents for an applicant and certify to USAC that it has done so. USAC staff reviews that certification—but not the actual underlying documents—before authorizing a TPIV override. USAC's data reveal that wireless resellers enrolled 277,599 subscribers through the new TPIV process, with some wireless resellers relying on that process much more heavily than others. In all, the annual cost of subscribers enrolled through TPIV overrides approaches $122 million.

Fifth, USAC explained that the NLAD authenticates an applicant's address with the U.S. Post Office database but that wireless resellers can override a failed address authentication without any review by USAC staff. USAC's data reveal that wireless resellers enrolled 494,921 subscribers through the address override process since October 2014, with some wireless resellers relying on that process much more heavily than others. The annual cost of subscribers enrolled through address overrides is almost $55 million.

Putting these numbers together, wireless resellers provided service to 213,283 known duplicates, claimed support for up to 460,032 phantom customers, and enrolled 5,885,649 subscribers by overriding federal safeguards between October 2014 and April 2016. That likely resulted in hundreds of millions of Universal Service Fund money—taxpayer money—going not to deserving low-income consumers but to wireless resellers. That's outrageous. I plan to work with this Committee and my colleagues to stop this spending spree immediately.

* * *

Chairman Walden, Ranking Member Eshoo, and Members of the Subcommittee, thank you again for holding this hearing and inviting me to testify. I look forward to answering your questions, listening to your views, and continuing to work with you and your staff in the days ahead.

Before the

Federal Communications Commission

Washington, D.C. 20554

In the Matter of	)	
	)	
Lifeline and Link Up Reform and	)	WC Docket No. 11-42
Modernization	)	
	)	
Telecommunications Carriers Eligible for	)	WC Docket No. 09-197
Universal Service Support	)	

PETITION FOR RECONSIDERATION OF NATIONAL TRIBAL TELECOMMUNICATIONS ASSOCIATION

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January 3, 2017

I. Introduction

Pursuant to Section 1.429 of the Commission's rules, the National Tribal Telecommunications Association ("NTTA") submits this Petition for Reconsideration of the Wireline Competition Bureau's ("Bureau") *Order* adopted in the Federal Communications Commission's ("FCC" or "Commission") above-captioned proceeding conditionally granting designation to certain mobile wireless resellers to be Lifeline Broadband Providers ("LBP") under the Commission's Lifeline universal service support mechanism.[1]

NTTA's member companies consist of Tribally-owned communications companies including Cheyenne River Sioux Telephone Authority, Fort Mojave Telecommunications, Inc., Gila River Telecommunications, Inc., Hopi Telecommunications, Inc., Mescalero Apache Telecom, Inc., Saddleback Communications, San Carlos Apache Telecommunications Utility, Inc., Tohono O'odham Utility Authority, and Warm Springs Telecom. NTTA's mission is to be the national advocate for telecommunications service on behalf of its member companies and to provide guidance and assistance to members who are working to provide modern telecommunications services to Tribal lands.

NTTA members have long served their tribal communities and helped advance the communications priorities and goals of those communities as articulated by their tribal governments. The Commission has recognized this right of tribal governments since it

[1] *Lifeline and Link Up Reform and Modernization et al.*, WC Docket No. 11-42 et al., Order, DA 16-1325 (Dec. 1, 2016) (*LBP Designation Order*).

determined that carriers seeking to be designated as eligible telecommunications carriers ("ETC") to serve tribal lands should petition the Commission, instead of state jurisdictions, which in turn would work with tribal governments to ensure the Commission's fiduciary duties were fulfilled.[2] Protection of tribal sovereign rights to determine how to advance communications priorities and goals coupled with a showing of the failure by the Bureau to follow procedures established by the Commission and set forth in its rules, form the basis of this petition for reconsideration.

In considering a petition for reconsideration, the Commission requires that petitioners "shall state with particularity the respects in which petitioner believes the action taken should be changed."[3] As will be demonstrated, there are particular violations of Commission rules that warrant the reconsideration of the Bureau's decision in the *LBP Designation Order*. Further, the facts NTTA puts forward below are ones that were made to and known by the Commission. NTTA filed comments in the proceeding and explained that the rule at issue in this petition was not complied with by either the applicants for LBP designation or the Commission.[4] NTTA, therefore, respectfully requests that the Commission consider the merits of this petition and reverse the Bureau's decision. NTTA further requests that the Commission make clear that any LBP applicant seeking to serve Tribal lands must comply with the requirements of section 54.202(c) and acknowledge its own need to comply with this rule.

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[2] *See Federal-State Joint Board on Universal Service; Promoting Deployment and Subscribership in Unserved and Underserved Areas, Including Tribal and Insular Areas*, CC Docket No. 96-45, Twelfth Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rulemaking, 15 FCC Rcd 12208 (2000) (*2000 Tribal Lifeline Order*).

[3] 47 C.F.R. § 1.429(c).

[4] 47 C.F.R. § 1.429(l)(2).

II. PURSUANT TO COMMISSION RULES, TRIBAL GOVERNMENTS AND TRIBAL REGULATORY AUTHORITIES SHOULD HAVE RECEIVED NOTICE FROM THE APPLICANTS AND THE COMMISSION SHOULD HAVE PROVIDED NOTICE THAT IT WAS SEEKING COMMENT ON THE PETITIONS FOR DESIGNATION TO BE LBPs.

In the *2016 Lifeline Modernization Order*, the Commission retained the requirement that Lifeline providers be designated as ETCs, but it streamlined procedures for entities to be designated as LBPs.[5] Streamlining of the process, however, did not relieve filing carriers of their obligation to provide a copy of their petition to affected tribal government and tribal regulatory authorities at the time they filed their petition with the Federal Communications Commission, nor did it relieve the Commission of its obligation to notify tribal governments and tribal regulatory authorities of requests made by carriers to serve tribal lands.[6] The requirements of section 54.202(c) are important obligations the Commission must uphold as they are grounded in the Commission's federal trust obligation and the tribes' sovereignty and self-determination rights. There is no evidence in the record of compliance with section 54.202(c) by the carriers granted LBP status in the *LBP Designation Order*. For this reason, the Commission should reconsider and reverse the Bureau's granting of LBP status to those petitioners that seek to serve on tribal lands.

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[5] *See Lifeline and Link Up Reform and Modernization et al.*, WC Docket No. 11-42 et al., Third Report and Order, Further Report and Order, and Order on Reconsideration, 31 FCC Rcd 3962, 4063, para. 223 (2016) (*2016 Lifeline Modernization Order*).

[6] *Id*. at 4067, para. 284 ("All LBPs, regardless of whether they qualify for streamlined treatment, must meet the requirements for designation as a Lifeline-only ETC established in Section 214(e) of the Act and section 54.201 and 54.202 of the Commission's rules."). *See* 47 C.F.R. § 54.202(c) ("A common carrier seeking designation as an eligible telecommunications carrier under section 214(e)(6) for any part of Tribal lands shall provide a copy of its petition to the affected tribal government and tribal regulatory authority, as applicable, at the time it files its petition with the Federal Communications Commission. In addition, the Commission shall send any public notice seeking comment on any petition for designation as an eligible telecommunications carrier on Tribal lands, at the time it is released, to the affected tribal government and tribal regulatory authority, as applicable, by the most expeditious means available.").

A. Important Tribal Rights are Embodied in Section 54.202(c)

Section 54.202(c) of the Commission's rules traces its genesis back to a series of decisions made by the Commission beginning in 2000 that have continued through its 2016 decision in this proceeding. In 2000, the Commission took concrete steps to formalize its recognition of tribal sovereignty, self-determination, and its federal trust obligation. The Commission recognized, through its *Tribal Policy Statement*, the unique legal relationship and federal trust relationship it, as part of the federal government, has with tribal governments. It further recognized the tribal governments' "inherent sovereign powers over their members and territory."[7] In order to foster better coordination between the FCC and tribal governments, the Commission committed to "consult[ing] with tribal governments prior to implementing any regulatory action or policy that will significantly or uniquely affect Tribal governments, their land and resources."[8]

Concurrent with the adoption of the *Tribal Policy Statement*, the Commission also expounded on its authority, under section 214(e)(6) of the Telecommunications Act of 1996, to determine whether state commissions had jurisdiction over carriers seeking to serve tribal lands within their boundaries and designating ETCs to serve tribal lands where the Commission found the state commission lacked jurisdiction.[9] As the Commission stated in the *2000 Tribal Lifeline Order*, "we are mindful that the federal trust doctrine imposes on federal agencies a fiduciary duty to conduct their authority in manner that protects the interest of the tribes."[10]

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[7] *See Statement of Policy on Establishing Government-to-Government Relationship with Indian Tribes*, Policy Statement, 16 FCC Rcd 4078, 4080 (2000).

[8] *Id*. at 4081.

[9] *2000 Tribal Lifeline Order*, 15 FCC Rcd 12208.

[10] *Id*. at 12263, para. 119.

In 2005, the Commission took additional steps to formalize notice requirements it and carriers seeking designation to serve tribal lands would need to undertake in order to provide tribal governments and tribal regulatory authorities a meaningful opportunity to comment on petitions that would affect their tribal lands.[11] Applicants seeking designation for ETC status on tribal lands were required to provide copies of their petitions to the affected tribal governments and tribal regulatory authorities at the time of the filing of their application with the Commission. In addition, the Commission was required to send a copy of the public notice seeking comment on the petition to the tribal governments and regulatory authorities via overnight mail.[12] The *2005 Tribal ETC Designation Order* adopted the requirement that carriers and the Commission provide notice to tribal governments that is today section 54.202(c) of the Commission's rules, which remains in effect.

B. Petitioners and the Commission Did Not Comply with the Requirements of 54.202(c)

NTTA filed comments on November 17, 2016, reminding the Commission of the obligations that exist under section 54.202(c).[13] In that filing, NTTA noted that it had only anecdotal evidence of one petitioner seeking to comply with the requirements. In a subsequent review of the 21 applications filed to date that clearly intend to serve Tribal lands, NTTA found only two applications that cited their compliance with the requirements of 54.202(c).[14] TracFone, which

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[11] *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 20 FCC Rcd 6371, 6400, para. 66 (2005).

[12] *Id*. at 6401, para. 67. The overnight mail requirement was subsequently changes to be "the most expeditious means available." 47 C.F.R. § 54.202(c).

[13] Comments of National Tribal Telecommunications Association, WC Docket No. 09-197, 11-42.

[14] NTTA reviewed the Commission's designated page for Lifeline Broadband Provider Petitions and Public Comment Periods at https://www.fcc.gov/lifeline-broadband-provider-petitions-public-comment-periods (last visited Dec. 28, 2016). In reviewing the applications, NTTA was able to identify 21 applications that clearly intend to serve Tribal lands, six that exclude Tribal lands, and four that are unclear on whether the applicant intends to serve Tribal lands.

has applied for a nationwide grant, stated in its petition that "in accordance with 47 C.F.R. § 54.202(c), TracFone is sending a copy of its Petition to the relevant tribal governments and tribal regulatory authorities."[15] Similarly, the petition filed by Commnet Wireless, LLC notes that "section 54.202(c) requires a common carrier that seeks designation as an ETC under Section 214(e)(6) on Tribal lands to provide a copy of its petition to the affected tribal government and tribal regulatory authority at the time it files its petition with the Commission.[16] Commnet acknowledges such a requirement and certifies that a copy of its Petition will be provided to the Tribal governments and/or tribal regulatory authorities identified in [its petition] at the time of this [its]filing." No other applications certify their compliance. [17]

Applicants that failed to comply with this rule deny Tribal governments their rightful opportunity to review applications and evaluate whether those applicants will help advance the communications priorities and goals of the Tribal government. Such harm is an affront to Commission precedent and its trust obligations to Tribal governments which rely on the Commission to enforce its rules in protection of their interests.

Moreover, it is unclear whether the Commission itself provided any notice to the affected tribal governments. NTTA has consulted with some of the tribal governments that oversee their member companies and has not been able to identify a tribal government that was notified by the Commission of the existence of an application that sought designation to become an LBP on

[15] TracFone Wireless, Inc.'s Petition for Designation as a Lifeline Broadband Provider, WC Docket No. 09-197 (filed Oct. 31, 2016).

[16] Commnet Wireless, LLC's Petition for Streamlined Designation as a Lifeline Broadband Provider Eligible Telecommunications Carrier, WC Docket No. 09-197 at 11 (filed Dec. 8, 2016).

[17] Mescalero Apache Telecom, Inc was able to verify that its tribal government received a copy of TracFone's LBP petition.

their Tribal lands.[18] By failing to follow its own codified process, the Commission has also denied those affected Tribal governments an opportunity to review the applications.

As explained above, section 54.202(c) represents more than another requirement, it is the manifestation of the tribal sovereignty and federal trust relationship between the Commission and tribal governments. As such, it is deserving of recognition and compliance. There is no evidence that the carriers granted LBP designations in the *LBP Designation Order* complied with their requirements under section 54.202(c). Moreover, it would appear that the Commission did not comply with its obligations under that rule either. Therefore, NTTA asks that the Commission reconsider the Bureau's actions and reverse the granting of the petitions until such time as the Commission is able to remedy these rule violations.

III. THE COMMISSION SHOULD RECONSIDER THE BUREAU'S RECENT DESIGNATION OF TWO LBPs BECAUSE THEY WERE GRANTED BEFORE THE COMMENT PERIOD HAD ENDED.

The Commission must also reconsider the grant given to KonaTel and Freedom Pop because the comment period on the applications had not ended prior to the Bureau's granting of the LBP designation to these entities.[19] As noted on the Commission's website, the deadline for filing comments on the KonaTel *Petition* was December 21, 2016. The deadline for filing comments on the *FreedomPop Petition* was December 10, 2016. The Commission, however, granted the petitions on December 1, 2016 thereby denying potential commenters a full opportunity to

[18] NTTA does not consider the posting of LBP petitions filed, along with comment dates and states covered by petition, as adequate public notice.

[19] Petition of KonaTel Inc. for Streamlined Designation as a Lifeline Broadband Provider Eligible Telecommunications Carrier, WC Docket No. 09-197 (filed Nov. 21, 2016) (KonaTel Petition); Petition of STS Media, Inc. DBA FreedomPop for Streamlined Designation as a Lifeline Broadband Provider Eligible Telecommunications Carrier, WC Docket No. 09-197 (filed Nov. 10, 2016) (FreedomPop Petition).

consider the merits of the applications. KonaTel and FreedomPop are two of the 21 applications that failed to comply with the requirements of section 54.202(c), a point that could have been raised in the record had the comment period been completed. NTTA, therefore, asks that the Commission reconsider the designation of LBP given by the Bureau to KonaTel and FreedomPop to afford the public a full opportunity to comment on their petitions.

IV. Conclusion

For the above enumerated reasons, the Commission should reconsider the Bureau's *LBP Designation Order*. As NTTA has demonstrated, the rules that were not complied with by either the applicants or the Commission are important to the ongoing relationship between tribal governments and the Commission. They are relied upon to ensure the communications priorities and goals of the Tribal government are recognized. In addition, the Commission should reconsider the designations given to KonaTel and FreedomPop because the comment period for their petitions had not concluded prior to the Bureau's action granting the petitions.

Respectfully submitted,

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC

In the Matter of	)	
	)	
Telecommunications Carriers Eligible for Universal Service Support	)	WC Docket No. 09-197
	)	
	)	
Petitions for Designation as a Lifeline Broadband Provider	)	WC Docket No. 11-42
	)	

RESPONSE AND OPPOSITION OF BOOMERANG WIRELESS, LLC D/B/A ENTOUCH WIRELESS TO THE PETITION FOR RECONSIDERATION OF NATIONAL TRIBAL TELECOMMUNICATIONS ASSOCIATION

Boomerang Wireless, LLC d/b/a enTouch Wireless (Boomerang or the Company), by and through the undersigned counsel, respectfully submits this response and opposition to the National Tribal Telecommunications Association's (NTTA's)[1] petition for reconsideration of the Wireline Competition Bureau's (WCB's or Bureau's) December 1, 2016 Order designating Boomerang as a Lifeline Broadband Provider (LBP).[2] Boomerang acknowledges NTTA's concerns regarding notice requirements for LBP petitions and the Commission's long-standing policy of recognizing the sovereignty of Tribal governments and to involve Tribal governments

[1] *See* Petition for Reconsideration of National Tribal Telecommunications Association, WC Docket Nos. 11-42, 09-197 (Jan. 3, 2017) (Petition). Notably, NTTA does not represent any sovereign Tribal nation or other Tribal authority, but rather is a coalition of Tribally-owned communications companies. Boomerang notes that not a single Tribal nation or organization that represents Tribal nations has objected to either the form or substance of Boomerang's LBP petition or designation.

[2] *See Telecommunications Carriers Eligible for Universal Service Support*, *Petitions for Designation as a Lifeline Broadband Provider*, WC Docket Nos. 09-197, 11-42, Order, DA 16-1325 (WCB rel. Dec. 1, 2016) (LBP Designation Order). The LBP Designation Order was issued pursuant to the rule changes adopted in the Federal Communications Commission's (FCC's or Commission's) Lifeline Modernization Order. *See Lifeline and Link Up Reform and Modernization et al.*, WC Docket No. 11-42 et al., Third Report and Order, Further Report and Order, and Order on Reconsideration, FCC 16-38 (rel. Apr. 27, 2016) (Lifeline Modernization Order).

in policy decisions that affect Tribal consumers. However, the Petition presents no evidence of a material error or omission that would justify reconsideration or reversal of the LBP Designation Order. Neither the Company's petition for designation as an LBP nor the Commission's review and approval of it violated the Commission's rules with regard to LBP eligible telecommunications carrier (ETC) designations. Additionally, the streamlined process for the docketed filing and review of LBP petitions established in the Lifeline Modernization Order is consistent with processes employed by the Commission for streamlined review in other contexts, and provided NTTA and its members adequate notice and opportunity to comment on Boomerang's petition. Accordingly, the Petition should be denied.

Notwithstanding the foregoing, Boomerang is both cognizant and respectful of the sovereignty of Tribal governments and it is committed to notifying, and, if required, seeking approval from the relevant Tribal authorities in each state where it received LBP designation prior to providing services to Tribal consumers in those states. Moreover, Boomerang acknowledges that NTTA's Petition illustrates the potential for confusion about the LBP review and approval process. As discussed below, Boomerang would support certain actions by the Bureau to clarify these processes and avoid uncertainty going forward.

I. Standard of Review Under Section 1.429

NTTA submits its Petition pursuant to section 1.429 of the Commission's rules, which allows an interested party to seek reconsideration of a final order in a rulemaking proceeding.[3] The rule also states, however, that petitions for reconsideration "may be dismissed or denied by the relevant bureau(s) or office(s) [if they] … [f]ail to identify any material error, omission, or

[3] *See* 47 C.F.R. § 1.429.

reason warranting reconsideration."[4] As set forth in this response, the Petition fails to present any evidence of a material error or omission that would warrant reconsideration of the LBP Designation Order, and therefore should be denied.

II. Section 54.202(c) Does Not Apply to Petitions for LBP Designation

NTTA's Petition relies primarily on the argument that Boomerang and the Commission failed to comply with the procedural requirements of section 54.202(c) of the Commission's rules.[5] Specifically, NTTA asserts that Boomerang was obligated to provide a copy of its LBP petition to "affected tribal government and tribal regulatory authorities at the time" that Boomerang submitted its petition to the Commission.[6] NTTA bases its assertion on language in the Lifeline Modernization Order which states that "[a]ll LBPs … must meet the requirements for designation as a Lifeline-only ETC established in section 214(e) of the [Communications] Act and section 54.201 and 54.202 of the Commission's rules."[7] However, a closer examination of section 54.202 and the Lifeline Modernization Order shows that subsection (c) does not apply to LBP petitions.

Through the Lifeline Modernization Order, the Commission codified the requirements for requests for LBP designation through a new subsection (d) to section 54.202.[8] This new subsection states that "[a] common carrier seeking designation as a Lifeline Broadband Provider

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[4] *See* 47 C.F.R. § 1.429(l).

[5] *See* Petition at 4-8.

[6] *See id*. at 4. NTTA further claims that the Commission was required to "notify tribal governments and tribal regulatory authorities of requests made by carriers to serve tribal lands." *Id*.

[7] *See id*.; *see also* Lifeline Modernization Order ¶ 284.

[8] *See* 47 C.F.R. § 54.202(d). The Commission also adopted a new subsection (e) to section 54.202, which addresses requests for expansion of an LBP's approved service area. *See* 47 C.F.R. § 54.202(e).

eligible telecommunications carrier must *meet the requirements of paragraph (a) of this section*."[9] The adoption of separate requirements for LBP petitioners that expressly imposes only certain requirements of section 54.202(a)[10] on LBP applicants demonstrates that the Commission did not intend for subsection (c) to apply to LBP designation requests. Therefore, Boomerang was not required to provide copies of its petition to the relevant Tribal governments and Tribal regulatory authorities in the states where it was seeking LBP designation.

III. The Process for Reviewing and Approving LBP Petitions Is Consistent with the Commission's Processes for Streamlined Reviews in Other Contexts and Gave NTTA Adequate Notice of and Opportunity to Comment on Boomerang's Petition

The Commission's process for issuing the LBP Designation Order is consistent with traditional Commission practice regarding streamlined reviews. Applications chosen for streamlined review are presumed to be deemed granted unless the Commission informs the applicant otherwise during the streamlined review period.[11]

In the Lifeline Modernization Order, the Commission explained that a provider's petition for LBP designation will be subject to "expedited review and will be deemed granted **within** 60 days of the submission of a completed filing" unless the Commission notifies the petitioner the

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[9] *See* 47 C.F.R. § 54.202(d) (emphasis added).

[10] *See* Lifeline Modernization Order ¶ 284, n.746 (noting that the requirement to submit a 5-year improvement plan as required under section 54.202(a) would not apply to LBPs).

[11] *See id*. ¶¶ 278, 281; *see also Worldcom, Inc. et al. v. FCC and U.S.A*, No. 99-1395 (D.C. Cir. 1974) (noting that in the Interexchange Proceeding, the Commission adopted streamlined procedures whereby business service tariffs filed by AT&T were given streamlined processing whereby they were "presumed lawful" upon filing and would become effective after a fourteen day notice period); *Streamlining the International Section 214 Authorization Process and Tariff Requirements*, IB Docket No. 98-118, Report and Order, FCC 96-79 (rel. Feb. 29, 1996) (International Section 214 Order) (explaining that international section 214 applications are deemed automatically granted upon acceptance for streamlined processing); Review *of Commission Consideration of Applications under the Cable Landing License Act*, IB Docket No. 00-106, Report and Order, FCC 01-332 (rel. Dec. 14, 2001) (Cable Landing License Order).

designation is not "automatically effective."[12] The Commission further noted that petitions that do not meet the streamlining criteria will not receive a presumption of approval after 60 days but rather petitioners can expect action within six months of submission. It is clear from the language in the Lifeline Modernization Order that the Commission intended to adopt a streamlined procedure for LBP petitions consistent with its regulatory precedents[13] on such matters.

As a result, the streamlined LBP petition process does not contemplate nor include a formal notice and comment procedure. The decision to set up a LBP tracker webpage was simply a courtesy done for informational purposes only, and the "comment deadline" indicated was neither an official act of the Commission nor the Bureau. It is well settled that informal postings or releases do not bind the Commission. For example, in *MCI v. FCC*, the court found that a Commission-issued press release was an unofficial, informal summary of agency action and could not be relied on as formal public notice.[14] Comparably, here, the Bureau's LBP petitions webpage serves as a mere summary of LBP petition activity and cannot be relied on by NTTA or any other interested party as a legal mechanism establishing a formal comment cycle.

Though the Commission webpage does not constitute an official mechanism for comment, NTTA and its members had sufficient notice and opportunity to comment on Boomerang's petition. Boomerang's petition was electronically submitted and filed in a public docket designated to this proceeding. The requisite filing of the LBP designation petition in a pre-designated public docket afforded NTTA and its members adequate notice and opportunity

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[12] *See* Lifeline Modernization Order ¶ 278 (indicating petitions that do not qualify for streamlined processing will not be presumed to have LBP status approval) (emphasis added).

[13] *See generally* International Section 214 Order; Cable Landing License Order.

[14] *See generally MCI v. FCC*, 515 F.2d 385 (D.C. Cir. 1974).

to comment or oppose if they sought fit. Indeed, NTTA did in fact file comments with the Commission on November 17, 2016 regarding petitions filed for LBP designation at that time, and specifically referenced Boomerang's petition. Yet, NTTA raised no substantive issues about the petitions at that time. Thus, any claim by NTTA that it lacked notice of Boomerang's petition is moot and does not warrant reconsideration of Boomerang's LBP designation.

Pursuant to the Lifeline Modernization Order, the Commission may approve a streamlined LBP petition at any point within 60 days of submission of a completed LBP petition.[15] Therefore, the grant of Boomerang's LBP designation does not warrant a reconsideration of the Commission's decision.

IV. Boomerang Will Notify, and If Required, Seek Approval from the Relevant Tribal Authorities Prior to Providing Lifeline Service on Tribal Lands

While Boomerang respectfully opposes NTTA's Petition, it fully supports Commission policy recognizing the sovereignty of Tribal nations and similarly respects the sovereignty of all relevant Tribal governments and authorities throughout its LBP service area. Boomerang also acknowledges the Commission's policies designed to address the "the difficulties many Tribal consumers face in gaining access to basic services" and the "important role of universal service support in helping to provide telecommunications services to the residents of Tribal lands."[16] As such, Boomerang commits to notify and seek approval, if required, from the relevant Tribal authorities in each of the states where it was – or may in the future be – granted LBP designation prior to providing service to Tribal residents.

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[15] *See* Lifeline Modernization Order ¶ 278 (stating that LBP petitions eligible for streamlined processing "will be deemed granted *within* 60 days of the submission…").

[16] *Id*. ¶ 206.

Boomerang is a well-established provider of Lifeline services. The Company's business model includes a focus on providing service to residents on Tribal lands, and Boomerang currently provides Lifeline services to Tribal residents in 12 states. As a result of this experience, Boomerang has a unique understanding of the requirements to provide Tribal Lifeline service in various parts of the country. As it has done with respect to its Lifeline voice offerings, Boomerang will notify and seek the requisite approvals from the appropriate Tribal government or authority prior to offering Lifeline broadband services to residents of Tribal lands. Moreover, Boomerang previously agreed that it would not provide Lifeline voice services in certain territories served by Tribally-owned providers in Arizona, New Mexico and South Dakota, and will honor those agreements with respect to its Lifeline broadband services as well. Boomerang submits that these commitments will ensure that its Lifeline broadband service will best serve the interests of Tribal subscribers as well as advance the communications priorities and goals of Tribal authorities in each jurisdiction it serves.

V. NTTA's Petition Illustrates that Clarification from the Bureau Regarding the LBP Designation Process Is Warranted

Despite the deficiencies in the Petition that make reconsideration or reversal of the LBP Designation Order unwarranted, NTTA's request does illustrate the potential for confusion regarding the appropriate process for LBP petitions. As such, Boomerang would support certain actions by the Bureau to provide clarity about LBP petition requirements, and the process for reviewing and approving such petitions on a prospective basis, including the following:

- Issuance of guidance to clarify that section 54.202(c) does not apply in the LBP context in light of the adoption of section 54.202(d);
- Removal of the "Comment Deadline" column from the LBP petitions "tracker" page on the Commission's website and adoption of a formal mechanism to clarify expectations

regarding streamlined LBP applications modeled after the approach for streamlined processing that is used for international section 214 applications wherein the Commission issues a Public Notice noting the presumption of approval at any point within 60 days after submission of a petition that qualifies for streamlined processing without establishing a formal comment period; and

- Issuance of a public notice explaining that a streamlined LBP petition may be acted upon at any point within 60 days after submission, which would make clear that interested parties should submit comments on the petition as soon as possible.

Boomerang submits that these clarifications would help manage public expectations of the LBP review and approval process, and would prevent uncertainty going forward.[17]

VI. Conclusion

Boomerang respects the sovereignty of Tribal nations and understands the importance of ensuring that these entities have notice from service providers prior to commencement of service on sovereign Tribal lands. However, for the reasons set forth in this response, and in light of

[17] The Public Notice requirement contemplated herein should apply on a prospective basis only as new petitions for LBP designation are filed.

Boomerang's commitments to cooperate with the appropriate Tribal authorities prior to providing Lifeline broadband services in Tribal areas, the Petition should be denied.

Respectfully submitted,

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January 18, 2017

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC

In the Matter of	)	
	)	
Telecommunications Carriers Eligible for Universal Service Support	)	WC Docket No. 09-197
	)	
	)	
Petitions for Designation as a Lifeline Broadband Provider	)	WC Docket No. 11-42
	)	

RESPONSE AND OPPOSITION OF KONATEL, INC. TO THE PETITION FOR RECONSIDERATION OF NATIONAL TRIBAL TELECOMMUNICATIONS ASSOCIATION

KonaTel, Inc. (KonaTel or the Company), by and through the undersigned counsel, respectfully submits this response and opposition to the National Tribal Telecommunications Association's (NTTA's)[1] petition for reconsideration of the Wireline Competition Bureau's (WCB's or Bureau's) December 1, 2016 Order designating KonaTel as a Lifeline Broadband Provider (LBP).[2] KonaTel acknowledges NTTA's concerns regarding notice requirements for LBP petitions and the Commission's long-standing policy of recognizing the sovereignty of Tribal governments and to involve Tribal governments in policy decisions that affect Tribal

[1] *See* Petition for Reconsideration of National Tribal Telecommunications Association, WC Docket Nos. 11-42, 09-197 (Jan. 3, 2017) (Petition). Notably, NTTA does not represent any sovereign Tribal nation or other Tribal authority, but rather is a coalition of Tribally-owned communications companies. KonaTel notes that not a single Tribal nation or organization that represents Tribal nations has objected to either the form or substance of KonaTel's LBP petition or designation.

[2] *See Telecommunications Carriers Eligible for Universal Service Support*, *Petitions for Designation as a Lifeline Broadband Provider*, WC Docket Nos. 09-197, 11-42, Order, DA 16-1325 (WCB rel. Dec. 1, 2016) (LBP Designation Order). The LBP Designation Order was issued pursuant to the rule changes adopted in the Federal Communications Commission's (FCC's or Commission's) Lifeline Modernization Order. *See Lifeline and Link Up Reform and Modernization et al.*, WC Docket No. 11-42 et al., Third Report and Order, Further Report and Order, and Order on Reconsideration, FCC 16-38 (rel. Apr. 27, 2016) (Lifeline Modernization Order).

consumers. However, the Petition presents no evidence of a material error or omission that would justify reconsideration or reversal of the LBP Designation Order. Neither the Company's petition for designation as an LBP nor the Commission's review and approval of it violated the Commission's rules with regard to LBP eligible telecommunications carrier (ETC) designations. Additionally, the streamlined process for the docketed filing and review of LBP petitions established in the Lifeline Modernization Order is consistent with processes employed by the Commission for streamlined review in other contexts, and provided NTTA and its members adequate notice and opportunity to comment on KonaTel's petition. Accordingly, the Petition should be denied.

Notwithstanding the foregoing, KonaTel is both cognizant and respectful of the sovereignty of Tribal governments and it is committed to notifying, and, if required, seeking approvals from the relevant Tribal authorities in each state where it received LBP designation prior to providing services to Tribal consumers in those states. Moreover, KonaTel acknowledges that NTTA's Petition illustrates the potential for confusion about the LBP review and approval process. As discussed below, KonaTel would support certain actions by the Bureau to clarify these processes and avoid uncertainty going forward.

I. Standard of Review Under Section 1.429

NTTA submits its Petition pursuant to section 1.429 of the Commission's rules, which allows an interested party to seek reconsideration of a final order in a rulemaking proceeding.[3] The rule also states, however, that petitions for reconsideration "may be dismissed or denied by the relevant bureau(s) or office(s) [if they] … [f]ail to identify any material error, omission, or

[3] *See* 47 C.F.R. § 1.429.

reason warranting reconsideration."[4] As set forth in this response, the Petition fails to present any evidence of a material error or omission that would warrant reconsideration of the LBP Designation Order, and therefore should be denied.

II. Section 54.202(c) Does Not Apply to Petitions for LBP Designation

NTTA's Petition relies primarily on the argument that KonaTel and the Commission failed to comply with the procedural requirements of section 54.202(c) of the Commission's rules.[5] Specifically, NTTA asserts that KonaTel was obligated to provide a copy of its LBP petition to "affected tribal government and tribal regulatory authorities at the time" that KonaTel submitted its petition to the Commission.[6] NTTA bases its assertion on language in the Lifeline Modernization Order which states that "[a]ll LBPs … must meet the requirements for designation as a Lifeline-only ETC established in section 214(e) of the [Communications] Act and section 54.201 and 54.202 of the Commission's rules."[7] However, a closer examination of section 54.202 and the Lifeline Modernization Order shows that subsection (c) does not apply to LBP petitions.

Through the Lifeline Modernization Order, the Commission codified the requirements for requests for LBP designation through a new subsection (d) to section 54.202.[8] This new subsection states that "[a] common carrier seeking designation as a Lifeline Broadband Provider

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[4] *See* 47 C.F.R. § 1.429(l).

[5] *See* Petition at 4-8.

[6] *See id*. at 4. NTTA further claims that the Commission was required to "notify tribal governments and tribal regulatory authorities of requests made by carriers to serve tribal lands." *Id*.

[7] *See id*.; *see also* Lifeline Modernization Order ¶ 284.

[8] *See* 47 C.F.R. § 54.202(d). The Commission also adopted a new subsection (e) to section 54.202, which addresses requests for expansion of an LBP's approved service area. *See* 47 C.F.R. § 54.202(e).

eligible telecommunications carrier must *meet the requirements of paragraph (a) of this section*."[9] The adoption of separate requirements for LBP petitioners that expressly imposes only certain requirements of section 54.202(a)[10] on LBP applicants demonstrates that the Commission did not intend for subsection (c) to apply to LBP designation requests. Therefore, KonaTel was not required to provide copies of its petition to the relevant Tribal governments and Tribal regulatory authorities in the states where it was seeking LBP designation.

III. The Process for Reviewing and Approving LBP Petitions Is Consistent with the Commission's Processes for Streamlined Reviews in Other Contexts and Gave NTTA Adequate Notice of and Opportunity to Comment on KonaTel's Petition

The Commission's process for issuing the LBP Designation Order is consistent with traditional Commission practice regarding streamlined reviews. Applications chosen for streamlined review are presumed to be deemed granted unless the Commission informs the applicant otherwise during the streamlined review period.[11]

In its Petition, NTTA maintains the Commission's actions were improper and warrant reconsideration of the LBP designation to KonaTel because "the comment period on the applications had not ended prior to the Bureau's granting of" LBP designation KonaTel.[12]

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[9] *See* 47 C.F.R. § 54.202(d) (emphasis added).

[10] *See* Lifeline Modernization Order ¶ 284, n.746 (noting that the requirement to submit a 5-year improvement plan as required under section 54.202(a) would not apply to LBPs).

[11] *See id*. ¶¶ 278, 281; *see also Worldcom, Inc. et al. v. FCC and U.S.A*, No. 99-1395 (D.C. Cir. 1974) (noting that in the Interexchange Proceeding, the Commission adopted streamlined procedures whereby business service tariffs filed by AT&T were given streamlined processing whereby they were "presumed lawful" upon filing and would become effective after a fourteen day notice period); *Streamlining the International Section 214 Authorization Process and Tariff Requirements*, IB Docket No. 98-118, Report and Order, FCC 96-79 (rel. Feb. 29, 1996) (International Section 214 Order) (explaining that international section 214 applications are deemed automatically granted upon acceptance for streamlined processing); Review *of Commission Consideration of Applications under the Cable Landing License Act*, IB Docket No. 00-106, Report and Order, FCC 01-332 (rel. Dec. 14, 2001) (Cable Landing License Order).

[12] *See* Petition at 8.

NTTA fails, however, to acknowledge the specific parameters of what it means for a petition to be approved for streamlined processing. Commission precedent with streamlined procedures illustrates that applications that meet the specified streamlining criteria are expected to be noncontroversial and as such it is presumed that they will be deemed granted.[13] In this case, the Commission's LBP Designation Order confirms this assessment by explaining "there is no contradictory evidence available to us raising concern" about KonaTel's LBP petition or any other LBP petition granted.[14]

In the Lifeline Modernization Order, the Commission explained that a provider's petition for LBP designation will be subject to "expedited review and will be deemed granted **within** 60 days of the submission of a completed filing" unless the Commission notifies the petitioner the designation is not "automatically effective."[15] The Commission further noted that petitions that do not meet the streamlining criteria will not receive a presumption of approval after 60 days but rather petitioners can expect action within six months of submission. It is clear from the language in the Lifeline Modernization Order that the Commission intended to adopt a streamlined procedure for LBP petitions consistent with its regulatory precedents[16] on such matters.

As a result, the streamlined LBP petition process does not contemplate nor include a formal notice and comment procedure. The decision to set up a LBP tracker webpage was simply a courtesy done for informational purposes only, and the "comment deadline" indicated

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[13] *See e.g.*, Cable Landing License Order ¶ 13 (explaining that only applications that do not pose a risk will be streamlined); *Worldcom, Inc. et al. v. FCC and U.S.A.*;

[14] *See* LBP Designation Order ¶ 8.

[15] *See* Lifeline Modernization Order ¶ 278 (indicating petitions that do not qualify for streamlined processing will not be presumed to have LBP status approval) (emphasis added).

[16] *See generally* International Section 214 Order; Cable Landing License Order.

was neither an official act of the Commission nor the Bureau. It is well settled that informal postings or releases do not bind the Commission. For example, in *MCI v. FCC*, the court found that a Commission-issued press release was an unofficial, informal summary of agency action and could not be relied on as formal public notice.[17] Comparably, here, the Bureau's LBP petitions webpage serves as a mere summary of LBP petition activity and cannot be relied on by NTTA or any other interested party as a legal mechanism establishing a formal comment cycle.

Though the Commission webpage does not constitute an official mechanism for comment, NTTA and its members had sufficient notice and opportunity to comment on KonaTel's petition. KonaTel's petition was electronically submitted and filed in a public docket designated to this proceeding. The requisite filing of the LBP designation petition in a pre-designated public docket afforded NTTA and its members adequate notice and opportunity to comment or oppose if they sought fit. Indeed, NTTA did in fact file comments with the Commission on November 17, 2016 regarding petitions filed for LBP designation at that time. Yet, NTTA raised no substantive issues about the petitions on file at that time – or at any time since about those or any other LBP petitions. Thus, any claim by NTTA that it lacked notice of KonaTel's petition appears to be one of form over substance and does not warrant reconsideration of KonaTel's LBP designation.

Pursuant to the Lifeline Modernization Order, the Commission may approve a streamlined LBP petition at any point within 60 days of submission of a completed LBP petition.[18] Therefore, the grant of KonaTel's LBP designation does not warrant a reconsideration of the Commission's decision.

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[17] *See generally MCI v. FCC*, 515 F.2d 385 (D.C. Cir. 1974).

[18] *See* Lifeline Modernization Order ¶ 278 (stating that LBP petitions eligible for streamlined processing "will be deemed granted *within* 60 days of the submission…").

IV. KonaTel Will Notify, and If Required, Seek Approval from the Relevant Tribal Authorities Prior to Providing Lifeline Service on Tribal Lands

While KonaTel respectfully opposes NTTA's Petition, it fully supports Commission policy recognizing the sovereignty of Tribal nations and similarly respects the sovereignty of all relevant Tribal governments and authorities throughout its LBP service area. KonaTel also acknowledges the Commission's policies designed to address the "the difficulties many Tribal consumers face in gaining access to basic services" and the "important role of universal service support in helping to provide telecommunications services to the residents of Tribal lands."[19] As such, KonaTel commits to notify and seek approval, if required, from the relevant Tribal authorities in each of the states where it was – or may in the future be – granted LBP designation prior to providing service to Tribal residents.

KonaTel's LBP designation is limited to 15 states. The Company commits that it will notify and, if required, seek approvals from the appropriate Tribal government or authority prior to offering Lifeline broadband services to residents of Tribal lands (in the case of Oklahoma, KonaTel commits to notifying the Public Utilities Division of the Oklahoma Corporation Commission). KonaTel submits that these efforts will ensure that its Lifeline broadband service will best serve the interests of Tribal subscribers as well as advance the communications priorities and goals of Tribal authorities in each jurisdiction it serves.

V. NTTA's Petition Illustrates that Clarification from the Bureau Regarding the LBP Designation Process Is Warranted

Despite the deficiencies in the Petition that make reconsideration or reversal of the LBP Designation Order unwarranted, NTTA's request does illustrate the potential for confusion regarding the appropriate process for LBP petitions. As such, KonaTel would support certain

[19] *Id*. ¶ 206.

actions by the Bureau to provide clarity about LBP petition requirements, and the process for reviewing and approving such petitions on a prospective basis, including the following:

- Issuance of guidance to clarify that section 54.202(c) does not apply in the LBP context in light of the adoption of section 54.202(d);
- Removal of the "Comment Deadline" column from the LBP petitions "tracker" page on the Commission's website and adoption of a formal mechanism to clarify expectations regarding streamlined LBP applications modeled after the approach for streamlined processing that is used for international section 214 applications wherein the Commission issues a Public Notice noting the presumption of approval at any point within 60 days after submission of a petition that qualifies for streamlined processing without establishing a formal comment period; and
- Issuance of a public notice explaining that a streamlined LBP petition may be acted upon at any point within 60 days after submission, which would make clear that interested parties should submit comments on the petition as soon as possible.

KonaTel submits that these clarifications would help manage public expectations of the LBP review and approval process, and would prevent uncertainty going forward.[20]

VI. Conclusion

KonaTel respects the sovereignty of Tribal nations and understands the importance of ensuring that these entities have notice from service providers prior to commencement of service on sovereign Tribal lands. However, for the reasons set forth in this response, and in light of

[20] The Public Notice requirement contemplated herein should apply on a prospective basis only as new petitions for LBP designation are filed.

KonaTel's commitments to cooperate with the appropriate Tribal authorities prior to providing Lifeline broadband services in Tribal areas, the Petition should be denied.

Respectfully submitted,

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January 18, 2017

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC

In the Matter of	)	
	)	
Telecommunications Carriers Eligible for Universal Service Support	)	WC Docket No. 09-197
	)	
	)	
Petitions for Designation as a Lifeline Broadband Provider	)	WC Docket No. 11-42
	)	

RESPONSE AND OPPOSITION OF STS MEDIA, INC. D/B/A FREEDOMPOP TO THE PETITION FOR RECONSIDERATION OF NATIONAL TRIBAL TELECOMMUNICATIONS ASSOCIATION

STS Media, Inc. d/b/a FreedomPop (FreedomPop or the Company), by and through the undersigned counsel, respectfully submits this response and opposition to the National Tribal Telecommunications Association's (NTTA's)[1] petition for reconsideration of the Wireline Competition Bureau's (WCB's or Bureau's) December 1, 2016 Order designating FreedomPop as a Lifeline Broadband Provider (LBP).[2] FreedomPop acknowledges NTTA's concerns regarding notice requirements for LBP petitions and the Commission's long-standing policy of recognizing the sovereignty of Tribal governments and to involve Tribal governments in policy

[1] *See* Petition for Reconsideration of National Tribal Telecommunications Association, WC Docket Nos. 11-42, 09-197 (Jan. 3, 2017) (Petition). Notably, NTTA does not represent any sovereign Tribal nation or other Tribal authority, but rather is a coalition of Tribally-owned communications companies. FreedomPop notes that not a single Tribal nation or organization that represents Tribal nations has objected to either the form or substance of FreedomPop's LBP petition or designation.

[2] *See Telecommunications Carriers Eligible for Universal Service Support*, *Petitions for Designation as a Lifeline Broadband Provider*, WC Docket Nos. 09-197, 11-42, Order, DA 16-1325 (WCB rel. Dec. 1, 2016) (LBP Designation Order). The LBP Designation Order was issued pursuant to the rule changes adopted in the Federal Communications Commission's (FCC's or Commission's) Lifeline Modernization Order. *See Lifeline and Link Up Reform and Modernization et al.*, WC Docket No. 11-42 et al., Third Report and Order, Further Report and Order, and Order on Reconsideration, FCC 16-38 (rel. Apr. 27, 2016) (Lifeline Modernization Order).

decisions that affect Tribal consumers. However, the Petition presents no evidence of a material error or omission that would justify reconsideration or reversal of the LBP Designation Order. Neither the Company's petition for designation as an LBP nor the Commission's review and approval of it violated the Commission's rules with regard to LBP eligible telecommunications carrier (ETC) designations. Additionally, the streamlined process for the docketed filing and review of LBP petitions established in the Lifeline Modernization Order is consistent with processes employed by the Commission for streamlined review in other contexts, and provided NTTA and its members adequate notice and opportunity to comment on FreedomPop's petition. Accordingly, the Petition should be denied.

Notwithstanding the foregoing, FreedomPop is both cognizant and respectful of the sovereignty of Tribal governments and it is committed to notifying, and, if required, seeking approval from the relevant Tribal authorities in each state where it received LBP designation prior to providing services to Tribal consumers in those states. Moreover, FreedomPop acknowledges that NTTA's Petition illustrates the potential for confusion about the LBP review and approval process. As discussed below, FreedomPop would support certain actions by the Bureau to clarify these processes and avoid uncertainty going forward.

I. Standard of Review Under Section 1.429

NTTA submits its Petition pursuant to section 1.429 of the Commission's rules, which allows an interested party to seek reconsideration of a final order in a rulemaking proceeding.[3] The rule also states, however, that petitions for reconsideration "may be dismissed or denied by the relevant bureau(s) or office(s) [if they] … [f]ail to identify any material error, omission, or

[3] *See* 47 C.F.R. § 1.429.

reason warranting reconsideration."[4] As set forth in this response, the Petition fails to present any evidence of a material error or omission that would warrant reconsideration of the LBP Designation Order, and therefore should be denied.

II. Section 54.202(c) Does Not Apply to Petitions for LBP Designation

NTTA's Petition relies primarily on the argument that FreedomPop and the Commission failed to comply with the procedural requirements of section 54.202(c) of the Commission's rules.[5] Specifically, NTTA asserts that FreedomPop was obligated to provide a copy of its LBP petition to "affected tribal government and tribal regulatory authorities at the time" that FreedomPop submitted its petition to the Commission.[6] NTTA bases its assertion on language in the Lifeline Modernization Order which states that "[a]ll LBPs … must meet the requirements for designation as a Lifeline-only ETC established in section 214(e) of the [Communications] Act and section 54.201 and 54.202 of the Commission's rules."[7] However, a closer examination of section 54.202 and the Lifeline Modernization Order shows that subsection (c) does not apply to LBP petitions.

Through the Lifeline Modernization Order, the Commission codified the requirements for requests for LBP designation through a new subsection (d) to section 54.202.[8] This new subsection states that "[a] common carrier seeking designation as a Lifeline Broadband Provider

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[4] *See* 47 C.F.R. § 1.429(l).

[5] *See* Petition at 4-8.

[6] *See id*. at 4. NTTA further claims that the Commission was required to "notify tribal governments and tribal regulatory authorities of requests made by carriers to serve tribal lands." *Id*.

[7] *See id*.; *see also* Lifeline Modernization Order ¶ 284.

[8] *See* 47 C.F.R. § 54.202(d). The Commission also adopted a new subsection (e) to section 54.202, which addresses requests for expansion of an LBP's approved service area. *See* 47 C.F.R. § 54.202(e).

eligible telecommunications carrier must *meet the requirements of paragraph (a) of this section*."[9] The adoption of separate requirements for LBP petitioners that expressly imposes only certain requirements of section 54.202(a)[10] on LBP applicants demonstrates that the Commission did not intend for subsection (c) to apply to LBP designation requests. Therefore, FreedomPop was not required to provide copies of its petition to the relevant Tribal governments and Tribal regulatory authorities in the states where it was seeking LBP designation. FreedomPop respectfully notes that its petition for and grant of LBP designation invoked Tribal lands in only two states – Hawaii and Oklahoma – where Tribal lands are not governed by Tribal sovereigns.[11]

III. The Process for Reviewing and Approving LBP Petitions Is Consistent with the Commission's Processes for Streamlined Reviews in Other Contexts and Gave NTTA Adequate Notice of and Opportunity to Comment on FreedomPop's Petition

The Commission's process for issuing the LBP Designation Order is consistent with traditional Commission practice regarding streamlined reviews. Applications chosen for streamlined review are presumed to be deemed granted unless the Commission informs the applicant otherwise during the streamlined review period.[12]

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[9] *See* 47 C.F.R. § 54.202(d) (emphasis added).

[10] *See* Lifeline Modernization Order ¶ 284, n.746 (noting that the requirement to submit a 5-year improvement plan as required under section 54.202(a) would not apply to LBPs).

[11] FreedomPop notes further that in these states, it will endeavor to notify and work cooperatively with Tribal interests, including securing appropriate authority prior to distributing Lifeline services on property owned or controlled by Tribal nations.

[12] *See* Lifeline Modernization Order ¶¶ 278, 281; *see also Worldcom, Inc. et al. v. FCC and U.S.A*, No. 99-1395 (D.C. Cir. 1974) (noting that in the Interexchange Proceeding, the Commission adopted streamlined procedures whereby business service tariffs filed by AT&T were given streamlined processing whereby they were "presumed lawful" upon filing and would become effective after a fourteen day notice period); *Streamlining the International Section 214 Authorization Process and Tariff Requirements*, IB Docket No. 98-118, Report and Order, FCC 96-79 (rel. Feb. 29, 1996) (International Section 214 Order) (explaining that international section 214 applications are deemed automatically granted upon acceptance for streamlined processing);

In its Petition, NTTA maintains the Commission's actions were improper and warrant reconsideration of the LBP designation to FreedomPop because "the comment period on the applications had not ended prior to the Bureau's granting of" LBP designation FreedomPop.[13] NTTA fails, however, to acknowledge the specific parameters of what it means for a petition to be approved for streamlined processing. Commission precedent with streamlined procedures illustrates that applications that meet the specified streamlining criteria are expected to be noncontroversial and as such it is presumed that they will be deemed granted.[14] In this case, the Commission's LBP Designation Order confirms this assessment by explaining "there is no contradictory evidence available to us raising concern" about FreedomPop's LBP petition or any other LBP petition granted.[15]

In the Lifeline Modernization Order, the Commission explained that a provider's petition for LBP designation will be subject to "expedited review and will be deemed granted **within** 60 days of the submission of a completed filing" unless the Commission notifies the petitioner the designation is not "automatically effective."[16] The Commission further noted that petitions that do not meet the streamlining criteria will not receive a presumption of approval after 60 days but rather petitioners can expect action within six months of submission. It is clear from the language in the Lifeline Modernization Order that the Commission intended to adopt a

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Review *of Commission Consideration of Applications under the Cable Landing License Act*, IB Docket No. 00-106, Report and Order, FCC 01-332 (rel. Dec. 14, 2001) (Cable Landing License Order).

[13] *See* Petition at 8.

[14] *See e.g.*, Cable Landing License Order ¶ 13 (explaining that only applications that do not pose a risk will be streamlined); *Worldcom, Inc. et al. v. FCC and U.S.A.*;

[15] *See* LBP Designation Order ¶ 8.

[16] *See* Lifeline Modernization Order ¶ 278 (indicating petitions that do not qualify for streamlined processing will not be presumed to have LBP status approval) (emphasis added).

streamlined procedure for LBP petitions consistent with its regulatory precedents[17] on such matters.

As a result, the streamlined LBP petition process does not contemplate nor include a formal notice and comment procedure. The decision to set up a LBP tracker webpage was simply a courtesy done for informational purposes only, and the "comment deadline" indicated was neither an official act of the Commission nor the Bureau. It is well settled that informal postings or releases do not bind the Commission. For example, in *MCI v. FCC*, the court found that a Commission-issued press release was an unofficial, informal summary of agency action and could not be relied on as formal public notice.[18] Comparably, here, the Bureau's LBP petitions webpage serves as a mere summary of LBP petition activity and cannot be relied on by NTTA or any other interested party as a legal mechanism establishing a formal comment cycle.

Though the Commission webpage does not constitute an official mechanism for comment, NTTA and its members had sufficient notice and opportunity to comment on FreedomPop's petition. FreedomPop's petition was electronically submitted and filed in a public docket designated to this proceeding. The requisite filing of the LBP designation petition in a pre-designated public docket afforded NTTA and its members adequate notice and opportunity to comment or oppose if they sought fit. Indeed, NTTA did in fact file comments with the Commission on November 17, 2016 regarding petitions filed for LBP designation at that time. Yet, NTTA raised no substantive issues about the petitions on file at that time – or at any time since about those or any other LBP petitions. Thus, any claim by NTTA that it lacked notice of

[17] *See generally* International Section 214 Order; Cable Landing License Order.

[18] *See generally MCI v. FCC*, 515 F.2d 385 (D.C. Cir. 1974).

FreedomPop's petition appears to be one of form over substance and does not warrant reconsideration of FreedomPop's LBP designation.

Pursuant to the Lifeline Modernization Order, the Commission may approve a streamlined LBP petition at any point within 60 days of submission of a completed LBP petition.[19] Therefore, the grant of FreedomPop's LBP designation does not warrant a reconsideration of the Commission's decision.

IV. FreedomPop Will Notify, and If Required, Seek Approval from the Relevant Tribal Authorities Prior to Providing Lifeline Service on Tribal Lands

While FreedomPop respectfully opposes NTTA's Petition, it fully supports Commission policy recognizing the sovereignty of Tribal nations and similarly respects the sovereignty of all relevant Tribal governments and authorities throughout its LBP service area. FreedomPop also acknowledges the Commission's policies designed to address the "the difficulties many Tribal consumers face in gaining access to basic services" and the "important role of universal service support in helping to provide telecommunications services to the residents of Tribal lands."[20] As such, FreedomPop commits to notify and seek approval, if required, from the relevant Tribal authorities in each of the states where it was – or may in the future be – granted LBP designation prior to providing service to Tribal residents.

As noted above, FreedomPop's LBP petition requested authority to serve Tribal subscribers only in Hawaii and Oklahoma. Neither of these states have a Tribal sovereign authority that regulates Lifeline services offered to residents of either Hawaiian Home Lands or former reservations in Oklahoma. Nevertheless, FreedomPop commits to notifying both the

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[19] *See* Lifeline Modernization Order ¶ 278 (stating that LBP petitions eligible for streamlined processing "will be deemed granted *within* 60 days of the submission…").

[20] *Id*. ¶ 206.

Department of Hawaiian Home Lands in Hawaii and the Public Utilities Division of the Oklahoma Corporation Commission to ensure that its provision of Lifeline broadband service offerings to eligible residents of Tribal lands in these states is well known and serves the interests intended to be served through the enhanced Lifeline program for eligible Tribal residents in these two states.

V. NTTA's Petition Illustrates that Clarification from the Bureau Regarding the LBP Designation Process Is Warranted

Despite the deficiencies in the Petition that make reconsideration or reversal of the LBP Designation Order unwarranted, NTTA's request does illustrate the potential for confusion regarding the appropriate process for LBP petitions. As such, FreedomPop would support certain actions by the Bureau to provide clarity about LBP petition requirements, and the process for reviewing and approving such petitions on a prospective basis, including the following:

- Issuance of guidance to clarify that section 54.202(c) does not apply in the LBP context in light of the adoption of section 54.202(d);
- Removal of the "Comment Deadline" column from the LBP petitions "tracker" page on the Commission's website and adoption of a formal mechanism to clarify expectations regarding streamlined LBP applications modeled after the approach for streamlined processing that is used for international section 214 applications wherein the Commission issues a Public Notice noting the presumption of approval at any point within 60 days after submission of a petition that qualifies for streamlined processing without establishing a formal comment period; and
- Issuance of a public notice explaining that a streamlined LBP petition may be acted upon at any point within 60 days after submission, which would make clear that interested parties should submit comments on the petition as soon as possible.

FreedomPop submits that these clarifications would help manage public expectations of the LBP review and approval process, and would prevent uncertainty going forward.[21]

VI. Conclusion

FreedomPop respects the sovereignty of Tribal nations and understands the importance of ensuring that these entities have notice from service providers prior to commencement of service on sovereign Tribal lands. However, for the reasons set forth in this response, and in light of FreedomPop's commitments to cooperate with the Department of Hawaiian Home Lands in Hawaii and the Public Utilities Division of the Oklahoma Corporation Commission prior to providing Lifeline broadband services in Tribal areas, the Petition should be denied.

Respectfully submitted,

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January 18, 2017

[21] The Public Notice requirement contemplated herein should apply on a prospective basis only as new petitions for LBP designation are filed.

(3) This paragraph does not apply to offset or reimbursement support distributed pursuant to subpart G of this part.

(4) This paragraph does not apply to support distributed pursuant to subpart F of this part.

(b) A state commission shall upon its own motion or upon request designate a common carrier that meets the requirements of paragraph (d) of this section as an eligible telecommunications carrier for a service area designated by the state commission.

(c) Upon request and consistent with the public interest, convenience, and necessity, the state commission may, in the case of an area served by a rural telephone company, and shall, in the case of all other areas, designate more than one common carrier as an eligible telecommunications carrier for a service area designated by the state commission, so long as each additional requesting carrier meets the requirements of paragraph (d) of this section. Before designating an additional eligible telecommunications carrier for an area served by a rural telephone company, the state commission shall find that the designation is in the public interest.

(d) A common carrier designated as an eligible telecommunications carrier under this section shall be eligible to receive universal service support in accordance with section 254 of the Act and shall, throughout the service area for which the designation is received:

(1) Offer the services that are supported by federal universal service support mechanisms under subpart B of this part and section 254(c) of the Act, either using its own facilities or a combination of its own facilities and resale of another carrier's services (including the services offered by another eligible telecommunications carrier); and

(2) Advertise the availability of such services and the charges therefore using media of general distribution.

(e) For the purposes of this section, the term *facilities* means any physical components of the telecommunications network that are used in the transmission or routing of the services that are designated for support pursuant to subpart B of this part.

(f) For the purposes of this section, the term ''own facilities'' includes, but is not limited to, facilities obtained as unbundled network elements pursuant to part 51 of this chapter, provided that such facilities meet the definition of the term ''facilities'' under this subpart.

(g) A state commission shall not require a common carrier, in order to satisfy the requirements of paragraph (d)(1) of this section, to use facilities that are located within the relevant service area, as long as the carrier uses facilities to provide the services designated for support pursuant to subpart B of this part within the service area.

(h) A state commission shall designate a common carrier that meets the requirements of this section as an eligible telecommunications carrier irrespective of the technology used by such carrier.

(i) A state commission shall not designate as an eligible telecommunications carrier a telecommunications carrier that offers the services supported by federal universal service support mechanisms exclusively through the resale of another carrier's services.

[62 FR 32948, June 17, 1997, as amended at 63 FR 2125, Jan. 13, 1998; 64 FR 62123, Nov. 16, 1999; 71 FR 65750, Nov. 9, 2006]

§ 54.202 Additional requirements for Commission designation of eligible telecommunications carriers.

(a) In order to be designated an eligible telecommunications carrier under section 214(e)(6), any common carrier in its application must:

(1) (i) Commit to provide service throughout its proposed designated service area to all customers making a reasonable request for service. Each applicant shall certify that it will:

(A) Provide service on a timely basis to requesting customers within the applicant's service area where the applicant's network already passes the potential customer's premises; and

(B) Provide service within a reasonable period of time, if the potential customer is within the applicant's licensed service area but outside its existing network coverage, if service can be provided at reasonable cost by:

(*1*) Modifying or replacing the requesting customer's equipment;

(*2*) Deploying a roof-mounted antenna or other equipment;

(*3*) Adjusting the nearest cell tower;

(*4*) Adjusting network or customer facilities;

(*5*) Reselling services from another carrier's facilities to provide service; or

(*6*) Employing, leasing or constructing an additional cell site, cell extender, repeater, or other similar equipment.

(ii) Submit a five-year plan that describes with specificity proposed improvements or upgrades to the applicant's network on a wire center-by-wire center basis throughout its proposed designated service area. Each applicant shall demonstrate how signal quality, coverage or capacity will improve due to the receipt of high-cost support; the projected start date and completion date for each improvement and the estimated amount of investment for each project that is funded by high-cost support; the specific geographic areas where the improvements will be made; and the estimated population that will be served as a result of the improvements. If an applicant believes that service improvements in a particular wire center are not needed, it must explain its basis for this determination and demonstrate how funding will otherwise be used to further the provision of supported services in that area.

(2) Demonstrate its ability to remain functional in emergency situations, including a demonstration that it has a reasonable amount of back-up power to ensure functionality without an external power source, is able to reroute traffic around damaged facilities, and is capable of managing traffic spikes resulting from emergency situations.

(3) Demonstrate that it will satisfy applicable consumer protection and service quality standards. A commitment by wireless applicants to comply with the Cellular Telecommunications and Internet Association's Consumer Code for Wireless Service will satisfy this requirement. Other commitments will be considered on a case-by-case basis.

(4) Demonstrate that it offers a local usage plan comparable to the one offered by the incumbent LEC in the service areas for which it seeks designation.

(5) Certify that the carrier acknowledges that the Commission may require it to provide equal access to long distance carriers in the event that no other eligible telecommunications carrier is providing equal access within the service area.

(b) Any common carrier that has been designated under section 214(e)(6) as an eligible telecommunications carrier or that has submitted its application for designation under section 214(e)(6) before the effective date of these rules must submit the information required by paragraph (a) of this section no later than October 1, 2006, as part of its annual reporting requirements under § 54.209.

(c) *Public Interest Standard.* Prior to designating an eligible telecommunications carrier pursuant to section 214(e)(6), the Commission determines that such designation is in the public interest. In doing so, the Commission shall consider the benefits of increased consumer choice, and the unique advantages and disadvantages of the applicant's service offering. In instances where an eligible telecommunications carrier applicant seeks designation below the study area level of a rural telephone company, the Commission shall also conduct a creamskimming analysis that compares the population density of each wire center in which the eligible telecommunications carrier applicant seeks designation against that of the wire centers in the study area in which the eligible telecommunications carrier applicant does not seek designation. In its creamskimming analysis, the Commission shall consider other factors, such as disaggregation of support pursuant to § 54.315 by the incumbent local exchange carrier.

(d) A common carrier seeking designation as an eligible telecommunications carrier under section 214(e)(6) for any part of tribal lands shall provide a copy of its petition to the affected tribal government and tribal regulatory authority, as applicable, at the time it files its petition with the Federal Communications Commission. In addition, the Commission shall send

the relevant public notice seeking comment on any petition for designation as an eligible telecommunications carrier on tribal lands, at the time it is released, to the affected tribal government and tribal regulatory authority, as applicable, by overnight express mail.

(e) All eligible telecommunications carriers shall retain all records required to demonstrate to auditors that the support received was consistent with the universal service high-cost program rules. These records should include the following: data supporting line count filings; historical customer records; fixed asset property accounting records; general ledgers; invoice copies for the purchase and maintenance of equipment; maintenance contracts for the upgrade or equipment; and any other relevant documentation. This documentation must be maintained for at least five years from the receipt of funding.

[70 FR 29978, May 25, 2005, as amended at 72 FR 54217, Sept. 24, 2007]

§ 54.203 Designation of eligible telecommunications carriers for unserved areas.

(a) If no common carrier will provide the services that are supported by federal universal service support mechanisms under section 254(c) of the Act and subpart B of this part to an unserved community or any portion thereof that requests such service, the Commission, with respect to interstate services, or a state commission, with respect to intrastate services, shall determine which common carrier or carriers are best able to provide such service to the requesting unserved community or portion thereof and shall order such carrier or carriers to provide such service for that unserved community or portion thereof.

(b) Any carrier or carriers ordered to provide such service under this section shall meet the requirements of section 54.201(d) and shall be designated as an eligible telecommunications carrier for that community or portion thereof.

§ 54.205 Relinquishment of universal service.

(a) A state commission shall permit an eligible telecommunications carrier to relinquish its designation as such a carrier in any area served by more than one eligible telecommunications carrier. An eligible telecommunications carrier that seeks to relinquish its eligible telecommunications carrier designation for an area served by more than one eligible telecommunications carrier shall give advance notice to the state commission of such relinquishment.

(b) Prior to permitting a telecommunications carrier designated as an eligible telecommunications carrier to cease providing universal service in an area served by more than one eligible telecommunications carrier, the state commission shall require the remaining eligible telecommunications carrier or carriers to ensure that all customers served by the relinquishing carrier will continue to be served, and shall require sufficient notice to permit the purchase or construction of adequate facilities by any remaining eligible telecommunications carrier. The state commission shall establish a time, not to exceed one year after the state commission approves such relinquishment under this section, within which such purchase or construction shall be completed.

§ 54.207 Service areas.

(a) The term *service area* means a geographic area established by a state commission for the purpose of determining universal service obligations and support mechanisms. A service area defines the overall area for which the carrier shall receive support from federal universal service support mechanisms.

(b) In the case of a service area served by a rural telephone company, *service area* means such company's ''study area'' unless and until the Commission and the states, after taking into account recommendations of a Federal-State Joint Board instituted under section 410(c) of the Act, establish a different definition of service area for such company.

(c) If a state commission proposes to define a service area served by a rural telephone company to be other than such company's study area, the Commission will consider that proposed

Senate Committee on Appropriations
Subcommittee on Financial Services and General Government
Questions for Ajit Pai, Chairman, Federal Communications Commission

Senator Shelley Capito

Question: Please provide an update on the FCC's move/restack.

Response: The lease at the FCC's current headquarters location expires on October 16, 2017. In September 2015, the General Services Administration (GSA) issued a solicitation for offers to interested lease parties. In October 2015, Parcel 49C filed a pre-award agency level protest with GSA. In December 2015, the GSA Agency Protest Official issued a decision denying the protest in entirety. Thereafter, Parcel 49C filed a pre-award protest with GAO.

In March 2016, GAO issued a decision dismissing the Parcel 49C protest in part, and denying the balance of the protest. Parcel 49C proceeded to file a pre-award protest with the U.S. Court of Federal Claims in April 2016, and the court denied the protest in November 2016. In December 2016, the GSA executed a lease with Trammell Crow to move the FCC to a new building.

In February 2017, Parcel 49C, the owner of the current FCC's Headquarters building, filed a brief with the U.S. Court of Appeals for the Federal Circuit in an effort to retain the FCC as its tenant. In March 2017, the parties (Parcel 49C, GSA, and Trammell Crow) submitted a joint motion to the court to suspend the proceedings to allow the parties to attempt to resolve the protest outside of court.

The effort to resolve the protest outside of court is still ongoing. GSA is continuing to negotiate with Parcel 49C to obtain a lease extension for the FCC. And the FCC is continuing to work on the planning for the new building—GSA provided the FCC with a due date of August 9, 2017, for the FCC to submit its completed requirements to GSA and Trammell Crow so the design phase of the FCC's new space may begin.

Senator John Boozman

Question: Chairman Pai, I have been hearing concerns with the Commission's AM Revitalization proceeding. The elimination of certain interference protections on AM radio could generate new interference on AM radio and may harm Arkansans' ability to receive news and information. As Chairman of the Homeland Security subcommittee, I'm particularly interested in FEMA's concerns with the FCC's proposal to eliminate skywave interference protections for Class A stations, due to the threatened disruption to the emergency alert system. My state could be particularly vulnerable to a loss of emergency information due to increased interference. At nighttime, Arkansans receive 15 Class A radio stations, but under the current FCC proposal, a station upgrading its signal in a distant state could create added interference locally in Arkansas. I applaud the work the Commission has done thus far to improve AM radio, but I hope the Commission will heed FEMA's concerns with changing the interference protections for Class A AM radio stations.

Response: I can assure you that the continued integrity of the Emergency Alert System is a priority for the Commission. We are aware of FEMA's concerns, and we will certainly take them into account as we continue with our proceeding to revitalize the AM radio service.

Senator Jerry Moran

Question 1: I understand the next generation of wireless network infrastructure will be built using small-cell networks employing 5G wireless technology. The faster data speeds and improved connectivity of 5G is essential for the Internet of Things (IoT) which will unleash billions of dollars in economic growth. The

U.S. is the world leader in 4G, but I am worried we are not taking the necessary steps to maintain our global leadership to deploy 5G. Carriers tell me the regulatory barriers to deploy small-cell networks are outdated, hampering investment and economic growth. Do you agree 5G deployment is critical for the American economy, and if so, what steps is the FCC taking to eliminate barriers and costs to deploying 5G technology in a timely manner?

Response: Yes. 5G services will stimulate the American economy by providing end users with higher quality connections, more bandwidth, and lower latency. A key feature in the transition from 4G to 5G is a change in network architecture from heavy reliance on large, macro-cell towers to wireless networks that will include hundreds of thousands of densely-deployed small cells operating at lower power. As these networks evolve, the FCC is taking steps to accelerate the deployment of 5G facilities by removing any unnecessary barriers to such deployment, whether caused by federal law, FCC regulation, state, local, and/or tribal reviews, or other rules and procedures.

In April, the Commission adopted a Notice of Proposed Rulemaking and Notice of Inquiry on wireless infrastructure, which seeks comment on multiple measures to reduce regulatory barriers to investment and deployment in wireless network infrastructure. Moreover, earlier this year, I announced the formation of the Broadband Deployment Advisory Committee (BDAC), which is tasked with identifying regulatory barriers to infrastructure investment and making recommendations to the Commission on how to reduce or remove these barriers. The BDAC held its first meeting in April and its second meeting in July, and I hope will provide initial recommendations to the Commission by the end of the year.

Question 2: I continue to hear from Kansans who remain concerned about the status and effectiveness of the Universal Service Fund's (USF's) High-Cost program. In April, I joined a number of my colleagues in a letter to the FCC strongly encouraging you to take immediate steps to ensure sufficient resources are available to enable this program to work as statutorily mandated.

a. I hear that the budget shortfall is resulting in canceled network builds and undermining the intended effect of the reforms to make standalone broadband affordable for consumers. Are you hearing this too, and what steps are you taking to address this?

Response: Four years ago, I called on the Commission to tackle the issue of affordable broadband in rural America head-on. Despite the previous Commission's efforts in the *2016 Rate-of-Return Reform Order*, I still hear from small carriers that offering stand-alone broadband would put them underwater—that the rates they have to charge exceed the rates for bundled services because of the different regulatory treatment. This is unfortunate, but unsurprising. As I noted in my dissent to the *Order* in 2016, the previous Commission needlessly complicated our rate-of-return system and in many ways made it harder, not easier, for small providers to serve rural America.

To provide some relief, my colleagues in recent months have urged me to work through a punch list of lingering issues from the *Order*. Although I hope these changes will help, something more fundamental may be needed. After all, if the *Order* is not carrying out its stated purpose of advancing broadband deployment in rural America, we cannot ignore that problem—time is not on the side of rural Americans.

b. Some have talked about an infrastructure package from Congress as a potential solution for this USF budget shortfall. If Congress does come forward with such funding, would you commit to adequately funding the program for these small, rural carriers?

Response: If Congress does enact an infrastructure package that directs adequate funding to the program for these small, rural carriers, then yes, the Commission would faithfully discharge its duty to ensure these carriers have sufficient and predictable funding.

Question 3: As mentioned in some of your written testimonies, I believe that modernizing the federal government's information technology (IT) systems needs to remain a top-priority for all agencies. According to the Government Accountability Office's (GAO) 2015 High Risk Series report, the federal government annually spends over $80 billion on IT, but more than 75 percent of this spending is for "legacy IT". I have worked with my colleague Senator Udall on legislation called the Modernizing Government Technology (MGT) Act of 2017 in an effort to replace "legacy IT" systems that continue to plague numerous federal agencies. With examples like the reported cyberattack on the FCC's Electronic Comment Filing System, I think that this effort needs to remain a priority.

a. Could you please speak to the cybersecurity benefits resulting from the FCC's current and ongoing efforts to replace "legacy IT" systems?

Response: Replacing legacy IT systems with more modern systems and moving from local hosting of these systems to the cloud allows the FCC to more accurately monitor traffic to the FCC's site and applications. As a result, the FCC has been able to accommodate higher volumes of data without a corresponding increase in costs. The cloud-based solutions are far more secure than the legacy code that previously supported the Commission's applications. Our legacy systems contained code that was both unsupportable in the marketplace and subject to malware attacks. For example, the cloud-based systems have reduced our FISMA findings nearly 80%. The FCC can now afford to have the best tools on the market for its cyber mission because of the savings that resulted from moving to cloud products.

Question 4: Your testimony discussed the FCC's ongoing efforts to close the "Digital Divide" by expanding fixed and mobile broadband deployment in the Connect America Fund Phase II and the Mobility Fund Phase II. What role do you see the Rural Broadband Auctions Task Force playing in implementing these important USF-related auctions?

a. Could you please further elaborate on the Task Force's plan that you referred to in your written testimony?

Response: Absolutely. I have directed the Task Force to use resources from throughout the Commission to make sure both the CAF Phase II and MF Phase II auctions are implemented in a timely manner so that taxpayer funds are allocated efficiently for rural broadband deployment and that as many Americans as possible are able to get Internet access. The Task Force has been working with the staff of the Wireline Competition Bureau, the Wireless Telecommunications Bureau, the Office of General Counsel, the Office of Strategic Policy and Planning, the Office of the Managing Director, as well as others within the Commission to map out the steps necessary to proceed with these reverse auctions.

For example, the Task Force has been diligently working with auction experts inside and outside the agency to design the CAF Phase II auction, which has culminated in the Public Notice that the Commission is considering on its August open meeting to seek comment on the design of that auction as well as the surrounding processes (such as the forms of applications). In parallel, the Task Force has been overseeing the development of the IT systems that will ensure the smooth operation of the CAF Phase II auction once it commences next year.

Question 5: Title II and "Open Internet" rules are not the same and should not be conflated. If people are worried about Open Internet issues, shouldn't Congress act to put "Open Internet" rules into statute and thus end the regulatory ping pong and market uncertainty that results every time the Administration changes parties and a new FCC Chairman steps into this issue?

Response: I believe that legislation would provide greater certainty to consumers and companies alike.

Question 6: For each year beginning in 2011, and cumulatively, please provide Universal Service Fund (USF) annual collections and annual obligations. Please provide this information collectively and broken down by USF program.

Response:

Universal Service Fund - Collections (In Millions)								
	2011	2012	2013	2014	2015	2016	2017*	Total
High Cost	4,516.16	4,571.82	4,589.47	4,531.14	4,522.04	4,543.24	4,546.06	31,819.93
Lifeline	1,468.99	2,277.82	1,952.24	1,690.27	1,548.81	1,499.31	1,400.77	11,838.21
E-Rate	2,220.90	2,358.61	2,374.40	2,395.63	2,435.13	2,493.88	1,814.75	16,093.30
RHC	85.78	118.12	145.14	241.69	255.97	294.41	439.30	1,580.41
Total	8,291.83	9,326.37	9,061.25	8,858.73	8,761.95	8,830.84	8,200.88	61,331.85

Universal Service Fund - Obligations Incurred (In Millions)								
	2011	2012	2013	2014	2015	2016	2017*	Total
High Cost	4,061.26	4,101.25	4,578.75	3,843.15	12,294.51	3,313.80	8,734.17	40,926.89
Lifeline	1,588.43	2,081.88	2,008.59	1,683.20	1,567.00	1,572.97	1,405.70	11,907.77
E-Rate	3,118.21	3,469.76	3,046.09	3,689.25	2,802.31	2,230.18	3,363.66	21,719.47
RHC	211.63	243.81	204.77	201.86	338.19	206.18	641.31	2,047.74
Total	8,979.53	9,896.70	9,838.21	9,417.46	17,002.01	7,323.13	14,144.84	76,601.89

* In both tables above, the FY 2017 figures include projections for the fourth quarter.

Question 7: For each year beginning in 2011, and cumulatively, please provide Universal Service Fund (USF) annual collections and annual amounts dispersed. Please provide this information collectively and broken down by USF program. If these figures are different from the figures provided in response to Question 1, please explain the reason for the difference.

Response:

Universal Service Fund - Collections (In Millions)								
	2011	2012	2013	2014	2015	2016	2017*	Total
High Cost	4,516.16	4,571.82	4,589.47	4,531.14	4,522.04	4,543.24	4,546.06	31,819.93
Lifeline	1,468.99	2,277.82	1,952.24	1,690.27	1,548.81	1,499.31	1,400.77	11,838.21
E-Rate	2,220.90	2,358.61	2,374.40	2,395.63	2,435.13	2,493.88	1,814.75	16,093.30
RHC	85.78	118.12	145.14	241.69	255.97	294.41	439.30	1,580.41
Total	8,291.83	9,326.37	9,061.25	8,858.73	8,761.95	8,830.84	8,200.88	61,331.85

Universal Service Fund – Outlays (Amounts Disbursed) (In Millions)								
	2011	2012	2013	2014	2015	2016	2017*	Total
High Cost	4,084.31	4,113.66	4,046.15	4,116.08	4,269.20	4,590.48	4,600.55	29,820.43
Lifeline	1,601.83	2,088.14	1,992.53	1,683.32	1,582.80	1,554.81	1,452.38	11,955.81
E-Rate	2,400.21	2,293.70	2,208.71	2,380.79	2,163.59	2,584.67	2,875.91	16,907.58
RHC	133.23	173.56	163.20	195.00	260.90	303.55	351.64	1,581.08
Total	8,219.58	8,669.06	8,410.59	8,375.19	8,276.49	9,033.51	9,280.48	60,264.90

* In both tables above, the FY 2017 figures include projections for the fourth quarter.

The differences between obligations incurred and amounts dispersed each year largely relate to timing—funds must first be obligated before they are disbursed (and there may be a lag between the two), and adjustments may occur after obligations are incurred, which would affect the amounts dispersed.

Question 8: Since 2011, funds have been collected in excess of obligations, please provide the following information:

a. For amounts for which specific allocations are identified—
  i. Amount
  ii. Description of Intended allocation
  iii. FCC order or other action effectuating such allocation
b. For amounts for which specific allocations are not identified—
  i. Amount
  ii. Limitations on allocation of such funds (e.g., limited to a specific USF program), including citation to limiting rule, order, etc.

Response:

Universal Service Fund – Collections Less Obligations Incurred (In Millions)								
	2011	2012	2013	2014	2015	2016	2017	Total
High Cost	454.90	470.57	10.72	687.99	(7,772.47)	1,229.44	(4,188.11)	(9,106.96)
Lifeline	(119.44)	195.94	(56.35)	7.07	(18.19)	(73.66)	(4.93)	(69.56)
E-Rate	(897.31)	(1,111.15)	(671.69)	(1,293.62)	(367.18)	263.70	(1,548.91)	(5,626.17)
RHC	(125.85)	(125.69)	(59.63)	39.83	(82.22)	88.23	(202.01)	(467.33)
Total	(687.70)	(570.33)	(776.96)	(558.73)	(8,240.06)	1,507.71	(5,943.96)	(15,270.04)

The general instruction regarding excess funds is found in the FCC's rules at 47 C.F.R. § 54.709(b). If the contributions received by the Administrator in a quarter exceed the amount of universal service support program contributions and administrative costs for that quarter, the excess payments will be carried forward to the following quarter. The contribution factors for the following quarter will take into consideration the projected costs of the support mechanisms for that quarter and the excess contributions carried over from the previous quarter.

The Commission may instruct the Administrator to treat excess contributions in a manner other than as prescribed in paragraph (b). Such instructions may be made in the form of a Commission Order or a public notice released by the Wireline Competition Bureau. Any such public notice will become effective 14 days after release of the public notice absent further Commission action. Also, the Schools and Libraries and Rural Health Care program's collections occur within a given fund year; the outlays take place over a longer period, typically two to three years.

In addition, the FCC has provided additional instructions over time; see summarized details below:

- **High Cost – USF/ICC Transformation Order, 26 FCC Rcd 17663, 17847 (2011), paras. 559-563:** The FCC instructed USAC that if contributions to support the high-cost support mechanisms exceed high-cost demand, excess contributions were to be credited to a Connect America Fund reserve account (which has the effect of increasing or maintaining, instead of reducing, the contribution factor). Thus, USAC was directed to forecast total high-cost universal service demand as no less than $1.125 billion per quarter for years 2012-2017 in order to avoid dramatic shifts in the contribution factor while the Connect America Fund was implemented.

- **High Cost – USF/ICC Transformation Order, 26 FCC Rcd at 17663:** Alternative Connect America Model (A-CAM) is announced.
- **High Cost – Connect America Fund Order, 31 FCC Rcd 3087 (2016):** The FCC established the rules for A-CAM.
- **High Cost – January 2017 Public Notice, DA 17-99, pg. 3, n.12:** The FCC directed USAC to retain $1.768B in the high-cost account to cover the net increase in support associated with A-CAM for 2018-2026.
- **Schools and Libraries – Schools and Libraries Third Report and Order, 18 FCC Rcd 26912, 26933-35 (2003), paras. 52-58:** The FCC amended its rules to make unused funds available annually in the second quarter of each calendar year for use in the next full funding year of the Schools and Libraries mechanism. Based on the estimates provided by the Administrator, the Commission announces a specific amount of unused funds from prior funding years to be carried forward in accordance with the public interest to increase funds for the next full funding year in excess of the annual funding cap.
- **Schools and Libraries – E-rate Modernization Order, 29 FCC Rcd 8870, 8900 (2014), para. 81:** The FCC added a provision that the Chief of the Wireline Competition Bureau is delegated authority to determine the proportion of unused funds to meet category one demand and to direct USAC to use any remaining funds to provide category two support. See also 47 C.F.R. § 54.507(a)(5).

Question 9: Please describe the extent to which, if at all, prior period adjustment affects the information provided above.

Response:

Universal Service Fund – Annual Prior Period Adjustments per Quarterly Demand Filing (In Millions)								
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	YTD 2017	Total
High Cost	103.21	114.69	(10.09)	1.68	(19.70)	13.38	(13.71)	189.46
Lifeline	(16.80)	(46.77)	(332.81)	(49.15)	(60.57)	(30.44)	(53.16)	(589.70)
Schools and Libraries	(2.01)	0.01	(2.23)	0.79	(2.54)	0.14	(1.76)	(7.60)
Rural Health Care	58.28	48.33	(10.18)	(5.19)	(7.77)	7.29	(12.51)	78.25
Total	142.68	116.26	(239.05)	(290.92)	(381.50)	(9.63)	(81.14)	(743.30)

The prior period adjustments (PPAs) are added to or subtracted from program demand to determine the collection requirement. Since 2011, a total reduction to demand of $743 million has occurred through PPAs. These adjustments have no effect on obligations or disbursements.

Senator Chris Coons

Question 1: The budget request for the FCC is a 5% reduction below current levels, when eliminating the one-time moving costs we provided in FY17. I am concerned that this is an arbitrary amount, not the product of thoughtful analysis. The budget would rely on an agency-wide hiring freeze, which will not result in a strategic reallocation of staff, but a random loss of the agency's institutional knowledge. Please explain the strategic vision you have for the agency that would result in these final staffing levels. How will you reduce staff in the areas that are being deprioritized? How will you ensure that the vital daily functions of the agency are still being performed?

Response: The FCC has had essentially flat funding since fiscal year (FY) 2008. Before I became Chairman, the Commission dropped its FTE level from 1,776 to 1,572. The proposed FY 2018 budget will follow this trajectory by providing for 1,448 FTEs. This staffing decision adheres to the Office of Management and Budget's guidance for the FY 2018 budget submission to reduce spending by 5% from the prior fiscal year. In fact, the FCC's FY 2018 request represents a 5.2% reduction from FY 2017.

In light of current budgetary constraints, my strategic vision is simple—focus on our core mission and realize administrative efficiencies across-the-board, freeing up and redirecting staff to specific statutory-based tasks and provide them with the IT tools to accomplish their work. This vision includes refraining from regulatory overreach to conserve resources and foster economic growth. It also recognizes the reality that we are completely fee-funded, and reducing this burden will ultimately reduce the cost of services for American consumers. We will continue to find cost savings administratively to preserve our workforce options and use the most cost-efficient options for IT projects.

I should note that the spectrum auction cap, which has been steadily increasing over the past five years, was reduced by 5% as well. We arrived at this number after reviewing prior fiscal year spending and considering our anticipated workload for the next year. The lower cap is achievable in light of the scale-down of work associated with the broadcast television incentive auction. These budget reductions do not come easily.

Question 2: On April 3rd, President Trump signed a law which nullified the FCC's rules that provided protections for consumer internet privacy. I understand that you believe this should be the responsibility of the Federal Trade Commission, however, this is currently outside of their jurisdiction, so the FTC cannot provide this protection. So, with FTC lacking jurisdiction and FCC's rules nullified, what privacy protections are currently in place and who is enforcing them? Do you believe there ***should*** be protections in place when it comes to consumers' privacy on the internet and what should they be?

Response: Section 222 of the Communications Act requires telecommunications carriers to protect the privacy of their customers, and the FCC's Enforcement Bureau has existing guidance regarding how that section applies to ISPs' protection of consumers' privacy. American consumers' privacy deserves to be protected regardless of who handles their personal information. The Federal Trade Commission (FTC) is well-situated to deliver that consistent and comprehensive protection. The FTC is America's most experienced and expert privacy regulator, and the FCC's Restoring Internet Freedom Notice of Proposed Rulemaking proposes to return jurisdiction to the FTC and end the uncertainty and confusion that was created in 2015 when the FCC intruded in this space.

Question 3: As you know, when the FCC issued a proposed rule on net neutrality in 2014, a record-breaking number of Americans filed comments to say that they wanted the internet to remain open and fair, crashing the FCC's system. Already this year, when the FCC announced that net neutrality was on the calendar for discussion, the comments poured in again, crashing the FCC's system for a second time. How will you ensure that the comment system remains functional so that Americans can be confident

their comments are being received? How will you weigh the voices of millions of Americans who demand internet freedom?

Response: The Commission has received over 12 million comments in this proceeding already and the Electronic Comment Filing System (ECFS) continues to provide filers with the opportunity to make their views known. Although there was a disruption from the evening of May 7, 2017 until the following day caused by a nontraditional DDoS attack, commenters had ample time to submit comments to the FCC before the vote on the *Restoring Internet Freedom NPRM*, and the ECFS system to date has functioned very well since the adoption of the NPRM.

Although we cannot guarantee that the system will not be subject to any further disruptions, working with our commercial cloud providers, we have taken a number of steps to mitigate the impact of any future attacks on the system. Also, it is important to note that the FCC maintains four separate methods for commenting: sending a written document, filing through the normal web interface, filing through the API, or submitting through the electronic inbox using the Bulk Upload Template.

Any decision that the FCC makes in this proceeding will be based on the facts and the law, and we will look to the comments filed in the record to guide our determinations on the relevant issues. As with all proceedings before the FCC, we comply with Section 706 of the Administrative Procedure Act, as interpreted by the Supreme Court in (among other cases) *Consolo v. Federal Maritime Commission*, 383 U.S. 607, 619-620 (1966), as well as our own rules concerning public input. Essentially, the question is whether the agency collected evidence that a reasonable person would agree would be adequate to support the conclusions ultimately made. That is the standard that we will apply, and we will make the appropriate judgment based facts in the record and applicable law.

Question 4: The first ever incentive auction has concluded, but the work isn't done—now the FCC starts the process of moving the remaining broadcasters to new spectrum locations. Those broadcasters are concerned that the $1.75 billion set aside for their moving costs will be insufficient, and the 39-month timeframe is too short. What will the FCC do if there is not enough money or time to move all of the 957 broadcasters across the country? Will you commit, that no broadcaster will be forced off the air?

Response: I share your view that the post-auction transition must be done in a careful and orderly manner that minimizes viewer inconvenience; takes into account the interference and other dependencies of all the stations who will be changing channels; enables efficient allocation of the resources necessary for broadcasters to undertake the change; and ensures that winning bidders for wireless licenses in the forward auction can deploy in the 600 MHz band in a timely manner.

July 12 was the deadline for broadcast television stations that are going to be repacked during this process to submit construction permit applications and cost estimates to the Commission. And two days later, the FCC announced that the aggregate amount of the estimated costs reported by broadcast television stations and multichannel video programming distributors (MVPDs) eligible for reimbursement from the Commission was $2.115 billion. In this announcement, we cautioned that we expected to receive additional estimates from MVPDs and a small number of stations.

In recent days, the Commission has received several additional estimates, and the aggregate total of estimated costs has increased by approximately $24 million to $2.139 billion. At this point, we only expect to receive additional cost estimates from some smaller MVPDs and eight broadcast television stations. These eight stations were granted waivers of the July 12 deadline because they are unable to construct at their current channel assignment and must apply to receive a new one. But extrapolating from the estimates that we have received to date, we are confident that once all initial estimates are received, the aggregate total will be below $2.2 billion.

Looking beyond the initial round of estimates, the aggregate total of estimated repacking costs will continue to change as the post-incentive auction transition process proceeds. Many stations will end up amending their initial estimates. Additionally, both the Commission and its fund administrator

will conduct reviews of those estimates, which will likely alter the aggregate number. For these reasons, the FCC cannot definitively report how much the repack actually will cost. The final number could be lower than the current $2.139 billion. It could also be higher. But I can say that the agency expects the final number to be above the $1.75 billion that Congress has provided the Commission to reimburse impacted broadcast stations and MVPDs. As a result, unless Congress acts to raise the $1.75 billion cap, the substantial likelihood is that local broadcasters will be required to pay some portion of their repacking costs out of their own pockets. I would be happy to work with your office to address this issue.

If Congress does not provide additional funding, then I will work with my colleagues to determine how best to allocate the $1.75 billion that we have been provided. With respect to the timeline for the repack, we will continue to monitor the situation closely and go where the facts lead us. I have repeatedly stated that I believe no broadcaster should be forced off the air during this process as a result of circumstances outside of their control.

Question 5: The Lifeline and E-Rate programs provide internet for low-income Americans, and schools and libraries across the country. Both programs are critical to help close the digital divide and the homework gap, and both programs were also greatly expanded in the previous Administration. This year, under this administration, the FCC has taken a few concerning steps for these programs, by removing 9 providers from the lifeline program and revoking a staff report on the success of the e-rate program. What is your vision for the future of these two important programs? What future changes are you considering?

Response: I am deeply committed to doing everything within the FCC's power to close the digital divide. I have said that as long as I am Chairman, broadband will be a part of Lifeline. I also believe that it is necessary to strengthen the Lifeline program's efficacy and integrity by respecting the states' role in the program and ensuring the program is free of waste, fraud, and abuse.

The Government Accountability Office (GAO) recently released a report confirming that waste, fraud, and abuse are still all too prevalent in the Lifeline program. I have accordingly directed the Universal Service Administrative Company (USAC) to take immediate action to combat this abuse of the program and establish procedures for ongoing vigilance to protect the Fund. I stand ready to work with my colleagues to crack down on the unscrupulous providers that abuse the program so that the dollars we spend support affordable, high-speed broadband Internet access for our nation's poorest families.

I believe an effective E-rate program—one that promotes better connectivity for students and library patrons alike—can be a powerful tool to help bridge the digital divide. This is why, four years ago, I said that "E-rate is a program worth fighting for."

Unfortunately, there have been serious flaws in the administration of the E-rate program, specifically related to the process for schools and libraries to apply for E-rate funding, that are preventing many schools and libraries from getting that funding. I have asked USAC to provide a detailed report on plans to fix the existing problems so it can administer the E-rate program in a manner that is fully compliant with our rules and that works for applicants and participants.

Senator Patrick Leahy

Question 1: The President has expressed his interest in passing an infrastructure package that would invest in critical areas of our economy. Do you believe that the deployment of broadband is an essential component of any infrastructure package? What role will you and the FCC assume in ensuring that

broadband deployment – including deployment in rural areas – is part of the administration's infrastructure plans?

Response: Yes. I have stated publicly that if Congress moves forward with a major infrastructure package, broadband should be included. I also have said that any direct funding for broadband infrastructure appropriated by Congress should be administered through the FCC's Universal Service Fund.

Question 2: The FCC is undertaking an examination of the barriers to deploying investments in wireless broadband. Looking beyond the barriers, what role do you envision the Federal government, through programs at the FCC or other agencies, playing in making capital available for investment in broadband?

Response: We know that, in some areas, the business case for broadband deployment will just not be there absent government help. That is why in February of this year, the FCC adopted on a bipartisan basis a plan to make 4G LTE mobile broadband available in parts of rural America without wireless service. Phase II of the Mobility Fund will make available $4.53 billion in new funding over ten years for building mobile networks where the market would not otherwise do so. I have circulated for my colleagues' consideration for our August open meeting a proposed Mobility Fund Order that would establish a "challenge process" for resolving disputes over whether areas should be eligible for Mobility Fund subsidies. This is the next step in making sure funding is targeted at areas still lacking adequate coverage.

In February, the Commission also adopted rules for the Connect America Fund (CAF) Phase II competitive bidding process, and we are planning on moving forward with the next step—the CAF II Commitment Public Notice—at our August meeting. The CAF Phase II auction will offer almost $2 billion over the next ten years to broadband providers that commit to offer voice and broadband services to fixed locations in unserved high-cost areas in our country. The auction rules are structured to induce new entrants to participate—competitive entrants like wireless Internet service providers, small-town cable operators, satellite companies, and electric utilities.

Senator Joe Manchin

Question 1: The universal service mandate means that Americans living in even the most rural and remote areas of the nation must have access to comparable services available to those in urban communities. That necessarily includes reliable, affordable broadband access. At the beginning of this year, I introduced the *Rural Telecommunications and Broadband Service Act of 2017*. Importantly, that legislation would require a report defining what constitutes a rural area that has access to comparable services in accordance with the principles of universal service. I applaud your formation of the Broadband Deployment Advisory Committee, which I understand will focus on accelerating broadband deployment in rural America.

a. Would you commit to having this advisory committee focus on the question of what access to comparable services means in rural areas?

Response: The Broadband Deployment Advisory Committee (BDAC) is a crucial component in the FCC's efforts to close the digital divide. The mission of the BDAC includes making recommendations that would accelerate the deployment of high-speed Internet access in communities across the country, including rural America. The BDAC will provide an effective means for stakeholders to identify regulatory barriers to infrastructure investment and make recommendations on reducing and/or removing them, which will in turn enhance the Commission's ability to carry out its statutory responsibility to encourage broadband deployment to all Americans. The BDAC's comprehensive examination of ways to expedite broadband deployment in rural areas will include an examination of issues related to the one you raise in your question.

Question 2: The Commission's budget proposes to require the auction of additional spectrum by 2027. I strongly support the continued focus on making more spectrum available for commercial use. Federal communications policy both embraces and requires that rural Americans must have access to the economic opportunities provided by broadband access. Innovative ideas are not limited by geography. We must do more to ensure they are not limited by a lack of connectivity.

a. How can future auctions be structured to ensure additional wireless spectrum deployment in rural areas actually occurs?

Response: Eliminating the digital divide is one of my top priorities as Chairman. In my Digital Empowerment Agenda, I laid out three keys ways to encourage more mobile broadband in rural America, where high costs and low population density make the private-sector case for deployment much more difficult.

First, I said the FCC should move forward with a Mobility Fund Phase II, which with your support we have been doing. This program includes buildout requirements to ensure that the funds we provide are actually used to connect rural America.

Second, I said the FCC should increase the build-out obligations of wireless carriers and incentivize rural broadband investment by extending license terms up to 15 years. I have asked my colleagues to consider such a proposal at our August agenda meeting.

Third, I called on Congress to create a "rural dividend" to supplement existing funding sources by setting aside 10% of the money raised from future spectrum auctions for the deployment of mobile broadband in rural America. Although legislation would be required to enact a rural dividend, it would provide an ongoing source of funding to ensure that rural Americans get the mobile broadband opportunities they need.

Question 3: Broadband has an important role to play in providing access to healthcare services, particularly in rural America. I commend the Commission's work through the Connect2Health Task Force to provide valuable insight into broadband health policies. Most fundamentally, telehealth services are only an option for those who have a broadband connection. I strongly support the Commission's focus on closing the digital divide through programs such as Mobility Fund II, which has the potential to be a critical part of the broadband expansion necessary for telehealth in rural areas.

a. Beyond connectivity, would you please discuss what barriers to telehealth services currently exist at the state level?

Response: Through its broad stakeholder outreach and data gathering efforts, the FCC's Connect2Health Task Force has learned that the main barriers to the availability of telehealth services at the state level include: the need for more effective policies to streamline the deployment of broadband infrastructure and services for health; the need for a more coordinated and sustained effort to promote sustainable business models for broadband-enabled health in rural and underserved areas; a lack of understanding about the value proposition of broadband in helping to meet state and local health goals; and interstate physician licensure and other payment/reimbursement issues that are not within the FCC's ability to address.

In addition, small health care providers, especially those operating in rural areas, have cited cost, inadequate or lack of funding support, liability concerns, and lack of training/expertise as other barriers to telehealth services. Finally, another barrier is simple lack of access to telehealth services. Many consumers, especially in rural and underserved areas, reportedly obtain the bulk of their health care services at city and county health departments and other community health centers that do not offer telehealth services.

Question 4: I understand the Commission opened a proceeding in April to explore barriers to wireline broadband infrastructure deployment. I applaud the Commission's continued focus on rural broadband deployment. Under current law, most providers generally have a duty to allow other providers access to its broadband infrastructure like conduit. However, because broadband conduit cannot be visibly inspected, it has been brought to my attention that providers have had difficulty finding out where it is already in the ground. In turn, this can hinder broadband deployment.

a. Can ensuring greater access to conduit make financial sense for providers as well as help close the digital divide?

Response: Streamlining rules, accelerating approvals, and removing other barriers, where possible, will better enable broadband providers to build, maintain, and upgrade their networks, which in turn will lead to more affordable and accessible Internet access and other broadband services for consumers and businesses alike.

As you note, in April the Commission proposed and sought comment on a number of actions designed to accelerate the deployment of next-generation networks and services by removing barriers to infrastructure investment. In particular, that document seeks comment on how to reform the FCC's pole attachment rules to make it easier, faster, and less costly to access the poles, ducts, conduits, and rights-of-way necessary for building out next-generation networks. Additionally, I have also established the Broadband Deployment Advisory Committee (BDAC) to provide advice and recommendations to the Commission on how to accelerate deployment of broadband. I look forward to seeing the record develop on the promise of greater access to conduit as well as any recommendations from the BDAC on that issue, and of course working with your office to close the digital divide.

Question 5: A mix of low, mid, and high-band spectrum deployed in rural areas is necessary both for wireless coverage today and to build network capacity in the future. The broadcast incentive auction that concluded earlier this year was an important step to deliver additional low-band spectrum to carriers, which is particularly beneficial for expanding service in rural areas. Applications for construction permits and reimbursement cost estimates for reassigned broadcast stations are due next month.

a. Could you discuss the steps the Commission is taking right now to ensure the transition occurs as quickly as possible?

Response: The Commission released a Transition Scheduling Plan in January that sets forth the order and schedule of stations' channel moves throughout the transition period. The plan is designed to minimize viewer inconvenience, enable efficient allocation of the resources necessary for broadcasters to operate on their new frequencies, and ensure that winning bidders for wireless licenses in the forward auction can deploy in the 600 MHz band in a timely manner.

Commission staff has already granted hundreds of television stations' construction permits, enabling stations to move from planning to actual construction. We will continue to process construction permit applications and to implement the 10-phase construction schedule that we adopted in January to facilitate efficient use of the resources necessary to complete the transition.

b. What steps are you taking to ensure cost allocations for reassigned stations are not insufficient?

Response: July 12 was the deadline for broadcast television stations that are going to be repacked during this process to submit construction permit applications and cost estimates to the Commission. And two days later, the FCC announced that the aggregate amount of the estimated costs reported by broadcast television stations and multichannel video programming distributors (MVPDs) eligible for

reimbursement from the Commission was $2.115 billion. In this announcement, we cautioned that we expected to receive additional estimates from MVPDs and a small number of stations.

In recent days, the Commission has received several additional estimates, and the aggregate total of estimated costs has increased by approximately $24 million to $2.139 billion. At this point, we only expect to receive additional cost estimates from some smaller MVPDs and eight broadcast television stations. These eight stations were granted waivers of the July 12 deadline because they are unable to construct at their current channel assignment and must apply to receive a new one. But extrapolating from the estimates that we have received to date, we are confident that once all initial estimates are received, the aggregate total will be below $2.2 billion.

Looking beyond the initial round of estimates, the aggregate total of estimated repacking costs will continue to change as the post-incentive auction transition process proceeds. Many stations will end up amending their initial estimates. Additionally, both the Commission and its fund administrator will conduct reviews of those estimates, which will likely alter the aggregate number. For these reasons, the FCC cannot definitively report how much the repack actually will cost. The final number could be lower than the current $2.139 billion. It could also be higher.

But I can say that the agency expects the final number to be above the $1.75 billion that Congress has provided the Commission to reimburse impacted broadcast stations and MVPDs. As a result, unless Congress acts to raise the $1.75 billion cap, the substantial likelihood is that local broadcasters will be required to pay some portion of their repacking costs out of their own pockets. I would be happy to work with your office to address this issue.

Question 6: In 2013, West Virginia University became the first university in the United States to use TV white spaces to offer broadband access. TV white space spectrum can be particularly beneficial for last-mile broadband deployment in rural areas and I applaud the Commission's focus on wireless solutions that can narrow the digital divide.

a. How do you believe technologies such as these help expand broadband deployment in high-cost, hard to reach areas?

Response: Eliminating the digital divide is one of my top priorities as Chairman. I am also focused on promoting innovative means to help narrow that divide. Expanding broadband deployment in high-cost, hard-to-reach areas should not be a one-size-fits-all approach, so I am interested in how this spectrum can be used to help bridge the digital divide. That's why I went to South Boston, Virginia recently, where I saw for myself how students were using white-space devices to stay connected from home. We are currently studying this issue and engaging with all interested stakeholders to determine whether and how to proceed.

Senator Chris Van Hollen

Question 1: Chairman Pai--Congress gave the FCC robust rulemaking authority and statutory directives to protect consumers and competition, yet on many of the highest profile issues, such as net neutrality and privacy, you have sought to disclaim that authority to other agencies such as the FTC.

a. You have publicly said that there is evidence that Title II has slowed down investment in broadband. Have ISPs specifically stated that Title II classification is reducing investment? How has that investment been reduced? How is it related specifically to Title II and not other factors?

Response: Yes, ISPs have specifically stated that the *Title II Order* has reduced their investment. For example, just two months after the Commission issued the *Title II Order*, many small ISPs

declared under penalty of perjury that they were cutting back on investments because of that decision. Those declarations can be found in GN Docket No. 14-28.

b. If the Courts have said that Title II is a permissible grant of authority for the FCC why do you believe consumers have been or will be harmed by this classification?

Response: For nearly two decades, the Internet flourished under a bipartisan, light-touch regulatory framework upheld by the Supreme Court. As I stated when the Commission commenced the current proceeding, the evidence so far suggests that was the right way to go—we had a free and open Internet as well as tremendous investment in our networks prior to the *Title II Order*. In the *Restoring Internet Freedom NPRM*, the Commission discussed these issues and sought comment on whether there is harm from the Title II classification. In particular, I am concerned that the *Title II Order* has impeded infrastructure investment, which means fewer Americans benefiting from digital opportunity. I look forward to reviewing the record of the current proceeding to determine the best path forward for consumers.

i. Why do you believe that the FTC is best charged with this role despite Congressional directive and the court's ruling?

Response: The FTC has a long track record of protecting consumers' interests across the Internet ecosystem. As the staff of that agency recently commented in Docket No. 17-108:

"[t]he FTC has developed specific expertise over privacy and data security issues affecting BIAS [broadband Internet access service] providers. . . The FTC has consistently used its privacy and data security enforcement authority against unfair and deceptive practices by BIAS providers. . . One privacy law—not affected by the Title II Order—that the FTC continues to enforce against BIAS providers is the FCRA [Fair Credit Reporting Act]. . . For example, the FTC brought separate cases against Time Warner Cable and Sprint for allegedly imposing less favorable terms on consumers who had negative information on their credit reports, without providing notices required by the FCRA. . . In addition to enforcement, the FTC has long engaged in policy initiatives and business guidance efforts particularly germane to BIAS providers' privacy and data security practices."

c. You have publicly stated that there is no evidence of collusion or fast lane contracts between ISPs and edge service providers despite examples of this collusion. For example, from 2011–2013, AT&T, Sprint and Verizon blocked Google Wallet, a mobile-payment system that competed with a similar service called Isis, which all three companies had a stake in developing. In 2012, the FCC fined Verizon because Verizon as the nation's largest wireless network, had asked Google to remove 11 applications in the Android marketplace that were being used to circumvent Verizon's $20 tethering charge. Google agreed to remove the apps from its marketplace, thereby directly hurting consumers. However, you describe these future potential contracts as "efficient" methods of delivering content to end users.

i. Given your public statements, how will the FCC, under your leadership, address agreements between companies that throttle content from competitors?

Response: As with any adjudication, the FCC would address such agreements based on the relevant facts and the law with the goal of furthering the public interest. I cannot say in the absence of particular facts how the agency might approach a specific agreement.

d. Can you provide an example of when would a contract between an ISP and edge providers would be too "efficient" and harm consumer access to the internet? What would be the FCC's role in protecting consumers and competition if that situation arose?

Response: We are currently seeking comment in the context of the *Restoring Internet Freedom NPRM* on whether there are such contracts, what impact they may have, and what the appropriate regulatory response to them might be, and I look forward to reviewing the record to determine the best role for the FCC in protecting consumers going forward.

Question 2. The press has reported that ultimately you believe that a system where ISPs self-regulate is the best way going forward to protect consumer privacy.

a. Is protecting consumer data a priority for the FCC?

Response: Yes.

b. Do you believe a paragraph—written by lawyers—buried within long and complicated terms of use agreements, asking consumers to opt-in, instead of clearly asking them to opt-out, can sufficiently protect the privacy of most Americans?

Response: I believe clearly written and easy-to-understand policies best protect consumers.

c. Do you think it is the responsibility of Americans to hunt for information regarding how their sensitive information is being used by ISPs or you believe that companies should be more transparent?

Response: I believe all online companies should be transparent with respect to their use of sensitive consumer information.

d. Do you believe that consumers should have the right to determine who collects their data online and how it can be used?

Response: Yes.

e. Many consumers, particularly those in rural areas, cannot switch providers if they do not like their provider's privacy policy. What options does the FCC have for these users? What is their recourse?

Response: I have previously stated that fostering further broadband deployment, coupled with restoring the FTC's role as cop on the beat with respect to online privacy, would best serve all consumers, particularly those in rural areas.

f. Over 20 states have introduced legislation to reinstate the opt-in rule that was rolled back by Congress. Do you believe your public statements before the CRA was passed, Congressional actions, and the FCC have created a patchwork and disjointed system?

Response: In 2015, the FCC under the prior Administration created a disjointed system for protecting consumers' online privacy when it stripped privacy jurisdiction from the FTC by reclassifying broadband Internet access service as a common carrier service. As I have said before, the government should respect consumers' uniform expectation of privacy online and work towards restoring a uniform system of privacy protections administered by the FCC.

Question 3: Chairman Pai, you often say that the internet flourished because of competition. If fast lanes are created how will small start-ups compete against big business that can afford fast lanes?

Response: The Commission's *Restoring Internet Freedom NPRM* asks about the trade-offs of banning outright certain business models. In an age of rapid technological advancement, a variety of business models may be needed to support increasingly complex networks for delivering increasingly sophisticated services. Examples might be real-time or interactive services, such as the remote

monitoring of consumers' health care vital signs. Other examples might suggest less pro-competitive outcomes. We will review the record on this point as we determine the best way forward.

Question 4: Chairman Pai, in May you met with local and state MD officials on the issue of microcells. At that meeting, Montgomery County Executive Leggett underscored the importance of working with local authorities. Maryland is a unique state because we have very dense urban communities and rural and mountainous areas—we are a microcosm of the challenges of nationwide broadband deployment. I am very excited about the expansion 5G next generation networks. However, local governments feel that they are being left out of the conversation.

a. Commissioner Pai and Commissioner O'Rielly—you have both spoken numerous times about federal overreach and over regulation. What steps will you take to ensure that local jurisdictions are heard and that your actions do not preempt their regulations?

Response: In April 2017, the Commission adopted the *Wireless Infrastructure NPRM and NOI*, seeking comment on multiple potential measures to remove or reduce regulatory barriers to wireless network infrastructure investment and deployment. We solicited input on how Section 332(c)(7)(B) of the Communications Act applies to local government review of wireless facility siting applications and on other local requirements that have an impact on the deployment of wireless facilities. In addition to the opportunity to comment in this proceeding, we have met with local leaders such as yours and discussed their concerns, and on May 24, 2017 we held a Webinar on the NPRM and NOI for state and local governments. I look forward to completing this rulemaking expeditiously and working with stakeholders to ensure that 5G is a reality for all Americans.

b. Do you think federally regulated expansion will encourage the private sector to invest profits into areas that are less profitable to serve—such as rural areas?

Response: Reducing regulatory costs for broadband deployment will, by definition, improve the business case to deploy broadband everywhere in the United States. That's why removing regulatory barriers is so key to less-profitable-to-serve areas. But we know that, in some areas, the business case for broadband deployment will not be there absent government help. That is why in February of this year, the FCC adopted bipartisan plans to spur broadband deployment in rural America through the Connect American Fund Phase II and Mobility Fund Phase II reverse auctions. I should note that reducing the cost of deployment in the areas targeted by these auctions will mean that federal taxpayer dollars can be stretched farther to serve even more of rural America.

c. Do you agree that the private industry and local governments are working to create innovative solutions regarding microcells?

Response: Yes, I believe that in many cases wireless providers and state and local governments are working very well together to expedite wireless infrastructure deployments.

d. You have said Chairman Pai "the more heavily you regulate something, the less of it you're going to get." The FCC, under your directive, is aggressively rewriting its rules regarding pole attachment and is seeking Congress's approval to expand the Commission's authority over pole attachments.

i. Do you believe that this innovation would continue under the new rules and expanded authority?

Response: I have heard from countless consumers about the importance of increasing broadband deployment and heard from numerous ISPs that access to existing poles, conduit, and rights-of-way is critical delivering better, faster, cheaper broadband. This is one of the major cost elements to building a high-speed broadband network. If we are to put consumers first and increase competition

and innovation in the broadband marketplace, every indication is that we will need new rules for pole attachments.

Question 5. The Laboratory Division of the FCC is located in Columbia, MD. This facility conducts testing on radio frequencies and ensures that equipment sold in the U.S. meets safety standards. What resources are you devoting to support this division and its engineers?

Response: The Columbia, Maryland facility is one of the FCC's most important assets in terms of equipment and staff. In addition to housing our Office of Engineering (OET) and Technology's Laboratory (Lab), it also contains our Enforcement Bureau (EB) field office and monitoring equipment and the Sensitive Compartmented Information Facilities for the Public Safety and Homeland Security Bureau (PSHSB). The Lab houses engineers, administrative staff, and has test facilities including the Anechoic Chamber that permits testing of devices for compliance, interference, and safety requirements required by our rules. The test facilities and supporting equipment are also used to support the Commission's policy making activities by evaluating new technologies.

These operations are all essential to the Commission's core, spectrum-based mission. Accordingly, we will prioritize the allocation of financial and human resources to ensure that the work continues properly and that facilities are upgraded as soon as funds can be obligated for this purpose. I can report that the PSHSB staff have relatively new and modern facilities and that we are upgrading the OET building's HVAC system and infrastructure. We are also moving EB staff into the OET building to ensure they have more up-to-date facilities. And we hope to fund a modernized Equipment Authorization system, which will upgrade the database of equipment grants of certification used by the public and allow for more efficient interaction with the Lab staff during review.

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C. 20554

Office of the Director

July 31, 2017

The Honorable John Thune
Chairman
Committee on Commerce, Science, and Transportation
United States Senate
254 Russell Senate Office Building
Washington, D.C. 20510

Dear Chairman Thune:

Enclosed please find responses to the Questions for the Record submitted for Chairman Ajit Pai regarding his appearance before the Committee on July 19, 2017, at the hearing on his reappointment as a Member of the Federal Communications Commission.

If you have further questions, please feel free to contact me on (202) 418-2242.

Sincerely,

Timothy B. Strachan,
Director

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C. 20554

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Timothy B. Strachan,
Director

IMPORTANT -- PLEASE READ
DO NOT DETACH

United States Senate
Committee on Commerce, Science, and Transportation
Washington, D.C. 20510-6125

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MEMORANDUM

Date: July 21, 2017

To: The Honorable Ajit Pai

Date of Hearing: July 19, 2017

Hearing: Nominations Hearing

Thank you for your recent testimony before the Senate Committee on Commerce, Science, and Transportation. The testimony you provided was greatly appreciated.

Attached are **post-hearing questions** pertaining to the above-mentioned hearing. As a courtesy, please submit a single document consolidating the posed questions followed by your answers for insertion in the printed hearing record. Your responses can be e-mailed to Andrew_Timm@commerce.senate.gov, Jason_VanBeek@commerce.senate.gov, and docs@commerce.senate.gov.

Should the Committee not receive your response within the time frame mentioned below or if the Committee staffer assigned to the hearing is not notified of any delay, the Committee reserves the right to print the posed questions in the formal hearing record noting your response was not received at the time the record was published.

Committee staffer assigned to the hearing: Andrew Timm
Phone: (202) 224-1251
Date material should be returned: July 31, 2017.

Thank you for your assistance and, again, thank you for your testimony.

Question 1. Millions of rural Americans lack access to broadband, and bridging the digital divide is a priority for me and the Committee. As traditional fiber, cable, and 4G broadband is deployed throughout the country, policymakers must nevertheless be creative and open-minded when exploring all options to achieving universal service. What role do you see for unlicensed spectrum (Wi-Fi, TV White Spaces, millimeter wave, etc.) in connecting unserved rural households with broadband internet access?

Response: I strongly believe that unlicensed spectrum should play an important role in providing broadband service to rural areas, and I am committed to moving ahead expeditiously to achieve this goal. We can and should build on earlier successes in this area. For instance, wireless Internet Service Providers (WISPs) already are providing broadband service in many rural areas using unlicensed spectrum, particularly in the 2.4 GHz and 5 GHz "Wi-Fi" bands.

Also, several years ago, the FCC developed rules for providing broadband service on an unlicensed basis in the TV white spaces. I supported the Commission's decision in 2015 to revise the TV white space rules to facilitate deployments in rural areas by allowing for higher power to serve longer distances. And last year, we provided additional spectrum for unlicensed in the millimeter wave bands, doubling the available spectrum to cover 57–71 GHz.

It is essential that we move ahead with a renewed sense of purpose to bring broadband to every American. That's why the Commission is actively considering different methods for expanding access to spectrum, including unlicensed spectrum. For instance, we teed up a Notice of Inquiry on mid-band spectrum for Commission consideration at our August open meeting that, among other things, explores how we can make more mid-band spectrum available for unlicensed use.

Question 1. Are you considering major changes to the E-Rate program and, if so, can you elaborate how any changes may impact rural schools and libraries that depend on the program for connectivity?

Response: I am deeply committed to doing everything within the FCC's power to close the digital divide. I believe an effective E-rate program—one that promotes better connectivity for students and library patrons alike—can be a powerful tool to help bridge that divide. That is why, four years ago, I said that "E-rate is a program worth fighting for."

Unfortunately, there have been serious flaws in the administration of the E-rate program, specifically related to the process by which schools and libraries apply for E-rate funding, that are preventing many schools and libraries from receiving that funding. I have asked USAC, which administers the program on the FCC's behalf, to provide a detailed report on plans to fix existing problems so that the program is in full compliance with our rules and works for applicants and participants. And in general, I believe that we must focus on cutting unnecessary red tape and making the E-rate application process easier for schools and libraries.

Question 2. Will you commit to ensuring the E-Rate program remains strong in rural Missouri?

Response: Yes.

Question 3. During the broadcast television incentive auction, the FCC paid 28 UHF television stations more than $984 million to relocate to a VHF channel. Is the UHF discount is still necessary?

Response: In April, the Commission voted to reinstate the UHF discount until it could review in a more holistic proceeding later this year both the discount and the FCC's national television multiple ownership rule. This action returned the marketplace to the status quo that existed before October 2016. As you know, last year, the previous Commission voted to eliminate the UHF discount. However, it did so without simultaneously considering whether the national ownership cap should be modified. As the UHF discount and national television cap are inextricably linked, this decision was made in error. The national cap establishes a national ownership limit, and the discount is used to calculate whether the limit has been reached. Because of this connection, eliminating the UHF discount substantially tightened the national cap without any analysis of whether this tightening was in the public interest given current marketplace conditions.

Later this year, the Commission will launch a new proceeding that will broadly consider both whether the national ownership cap should be modified and whether the UHF discount should be retained. Any decision on whether the UHF discount remains necessary will be based on the facts compiled in that proceeding along with the relevant law.

Net Neutrality

So called "net neutrality" as implemented in former FCC Chairman Tom Wheeler's Open Internet Order was a bureaucratic power grab that took the Internet which has long been a transformational tool that has allowed innovation and creativity and created new economic opportunities for all Americans and turned the Internet into a regulated public utility under Title II of the Communications Act. Title II gives the government new authority over the Internet which could be used to determine pricing and terms of service.

What's concerning about the Title II debate is the influence that edge providers such as Google, Facebook and Netflix had with the Obama White House. For example, *The Intercept* has reported that between January 2009 and October 2015, Google staffers gathered at the White House on 427 separate occasions. *The Intercept* further notes that the frequency of the meetings increased from 32 in 2009 to 97 in 2014. This is concerning given that President Obama released a video on November 10, 2014 weighing into the net neutrality debate and advocated that the FCC regulate the Internet as a public utility. Not only did the Commission move forward and implement Title II but edge providers like Google were exempted from Title II.

Question 1. Were you concerned with the influence that the Obama White House had with the FCC in advocating for Title II?

Response: Yes.

Question 2. Building off the previous question, as you know, the FCC is funded by fees paid by those it regulates. Google, Microsoft, Facebook, and Amazon collectively have a market capitalization in excess of two trillion dollars. Are you troubled by the fact that not only did these companies have a cozy relationship with the Obama White House but that they use the regulatory process to seek the regulation of their competition- broadband providers, yet they contribute very little if anything towards offsetting the cost of the FCC's operations? Do you have thoughts on how we might remedy this inequity?

Response: Unfortunately, it is a common practice for companies to lobby government officials to either seek regulatory largesse and/or impose burdensome regulations on their competitors so that they can gain a competitive advantage. I have seen this practice during my time at the Commission and am troubled by it. In my view, the best way to remedy this problem is for the Commission to embrace a philosophy of regulatory parity and not use the regulatory process to reward favored industries and punish disfavored industries.

5G Wireless Technology Deployment

We are on the cusp of the wireless industry introducing the next generation of technology – 5G. That upgrade to our existing networks is expected to bring us higher data speeds, lower latency, and the ability to support breakthrough innovations in transportation, healthcare, energy and other sectors. And as recent studies have shown, 5G is expected to provide significant benefits to state and local governments, allowing them to become smart cities. However, those networks will also require many more antenna sites than we have today – they will increasingly rely on small cell technologies. To recognize these benefits, a study performed by Deloitte shows that several steps are necessary to remove impediments to antenna siting. Texas is leading the way, as evidenced by recent legislation (Texas Senate Bill 1004)

signed into law just last month that streamlines the deployment of next-generation 5G networks. It's also my understanding that the Commission has initiated a proceeding designed to evaluate whether some of those obstacles can be removed.

Question 1. Can you tell me what you hope to achieve in the ongoing proceeding and when it might be concluded?

Response: The Wireless Infrastructure Notice of Proposed Rulemaking (NPRM) and Notice of Inquiry (NOI), adopted on April 20, 2017, was intended to take a comprehensive look at the federal, state, and local regulatory requirements that affect the speed with which, and cost at which, wireless networks can be deployed and modernized. The Commission also adopted the same day a Wireline Infrastructure NPRM seeking comment on barriers to the deployment of wireline infrastructure (including the fiber that is critical to carrying wireless traffic).

In the wireless item, the Commission sought comment on regulatory impediments to wireless network infrastructure investment and deployment and on how to remove or reduce such impediments, consistent with the law and the public interest. The NPRM/NOI seeks comment on measures to streamline state and local government review of proposed infrastructure deployments and asks, for instance, about the timelines for local zoning reviews, the remedies available to applicants for missed deadlines, and the reasonableness of fees. In addition, the proceeding is examining how we might revise the Commission's rules and procedures for complying with the National Historic Preservation Act and the National Environmental Policy Act in ways that might help reduce the costs and delays associated with those review processes, while still satisfying our legal obligations and protecting important resources. Our objective is to facilitate and accelerate the deployment of the infrastructure needed to meet the country's needs for advanced wireless service and to make next-generation technologies available to all Americans. The comment cycle in this proceeding closed on July 17, 2017, and we are in the process of reviewing the record that's been compiled.

FCC Priorities

Question 1. My top priority is regulatory reform. Please identify three meaningful regulations that you are interested in repealing during your tenure at the FCC.

Response: (1) I am interested in repealing the copper retirement rules that the Commission adopted in 2015 so that carriers can spend less money maintaining the fading copper networks of yesterday and more money building and expanding the next-generation networks of tomorrow.

(2) I am interested in repealing the main studio rule, which appears to be an outdated regulation that imposes unnecessary costs on radio and television broadcasters.

(3) I am interested in repealing the outdated requirement that carriers completing payphone calls conduct annual audits of their payphone call tracking systems and file annual audit reports with the Commission, since these audits often cost more than the amount of the compensation being reviewed.

ICANN

Question 1. Last year the previous administration allowed the Federal Government's contract with ICANN to expire. Do you think that was a wise and prudent decision?

Response: I spoke out against that decision at the time. For instance, over three years ago, I wrote about my "serious doubts" in *National Review*, arguing that "[t]he current model of Internet governance has

been a tremendous success. It's allowed the Internet to remain free and operate reliably. If America steps back, foreign governments will be all too eager to step forward. . . . [T]he United States should not apologize for its leadership in promoting a free Internet." *See* "Giving Up the Internet: Still Risky," *National Review* (Apr. 23, 2014), *available at* http://www.nationalreview.com/article/376384/giving-internet-still-risky-ajit-pai.

Question 2. Microsoft and Facebook and YouTube, which is owned by Google, all of whom supported President Obama's Internet transition, have signed a code of conduct with the European Union to remove so-called hate speech from European countries in less than 24 hours. Do you think these global technology companies have a good record of protecting free speech? And what can be done to protect the First Amendment rights of American citizens?

Response: I am always concerned by the impulse to censor unpopular speech, whether at home or abroad. During my tenure at the Commission, I have consistently spoken out about the importance of protecting free speech. If I am fortunate enough to be confirmed, I will continue to do whatever I can to safeguard the First Amendment rights of the American people.

Question 1. The Government Accountability Office (GAO) recently made a recommendation in a May 2017 report that the Universal Service Fund should be moved from a private bank into the U.S. Treasury. What are your thoughts on this proposal? Do you foresee such action having an impact the long-term solvency of the fund as it relates to the federal government's future efforts to reduce the national deficit?

Response: I agree with this recommendation, and the Universal Service Administrative Company is actively working in coordination with the FCC and the Treasury to transfer the USF funds as recommended by GAO. I have not seen any evidence that moving the funds to the U.S. Treasury would affect the long-term solvency of the USF, nor am I aware of potential, specific impacts on the national deficit. Indeed, moving these funds to the U.S. Treasury will give the federal government the greatest ability to protect these funds from improper use and safeguard their important role in ensuring that every American gets connected.

I want to thank you and the current FCC Commissioners for working with my staff to help alleviate some of the burden that the reduction in reimbursement from the Rural Health Care program placed on Alaskan health care providers.

In my state, the price of telecommunications services is so expensive that many rural health care providers cannot afford them without support from the Rural Health Care program. Telemedicine services in Alaska are essential for many of our villages, and they are only possible if a health facility has connectivity.

In enacting the Telecommunications Act of 1996, Congress specifically directed the FCC to ensure that rural health care providers have access to telecommunications services at rates that are reasonably comparable to those for similar services in urban areas of the State. As you are aware, for the first time the demand for funding from the Rural Health Care program exceeded the $400 million cap.

Question 1. Will you work to ensure the sustainability of the Rural Health Care Program as the FCC moves forward to review further reforms to universal service programs?

Response: Yes.

Question 2. If confirmed, what steps would you take to address this funding issue?

Response: The rural healthcare program provides important funding to eligible health care providers (HCPs) for telecommunications and broadband services necessary for the provision of health care. I deeply appreciate the importance of these HCPs serving rural communities and the need for universal service funding in making sure all Americans have access to state-of-the-art healthcare. As the son of a doctor in Kansas who often travelled many miles to see his patients, and as a regulator who has seen firsthand the healthcare challenges in Alaska, I am well aware of the difficulties so many Americans have in getting adequate healthcare.

I have long made ensuring the viability of the RHC program for rural participants a priority. When the FCC created the Healthcare Connect Fund in 2012, I pushed the Commission to make sure that the majority of the funds were targeted at rural healthcare providers. And last December, I pushed the agency to crack down on waste, fraud, and abuse in the program to ensure sufficient funding for the many good actors that need it. I have asked Commission staff to look closely at the RHC program and to consider ways to strengthen it.

Question 3. Will you consider beginning a rulemaking proceeding to evaluate the changes necessary to ensure that the program budget is sufficient to fulfill the purposes of the program?

Response: Yes, as noted above, I have asked Commission staff to look closely at the RHC program and to consider ways to strengthen the program.

Question 4. What steps do you plan to take to increase the transparency and accountability of USAC?

Response: I agree with you that USAC must be more transparent and accountable than it's been in the past. That's why in my first week on the job, my office directed the Office of the Managing Director and the Wireline Competition Bureau to more actively oversee how USAC conducts its duties.

And I myself have directly intervened when necessary. For example, serious flaws in the administration of the E-rate program have prevented many schools and libraries from getting that funding. I have asked USAC to provide a detailed report on plans to fix the existing problems so it can administer the E-rate program in a manner that is fully compliant with our rules and that works for applicants and participants.

Similarly, after the Government Accountability Office (GAO) recently released a report confirming that waste, fraud, and abuse are still all too prevalent in the Lifeline program, I directed USAC to take immediate action to stop this abuse of the program and establish procedures for ongoing vigilance to protect the Fund.

Last Congress, I questioned the previous chairman, Chairman Wheeler, about a constituent of mine who had license renewal applications pending at the FCC for more than 13 years, which I find unacceptable. At my urging, the FCC acted on some of those pending applications, but requested more information which my constituent submitted and continues to wait for an answer.

Question 5. What type of action do you plan to take, or have you taken, to improve the timeliness of FCC action on items submitted for approval or for review?

Response: I agree that it is important for the FCC to act on matters in a timely manner. That's why, for instance, I have made clear that section 7 of the Communications Act will be enforced during my tenure as Chairman. That provision states that the Commission will decide within one year whether any petition for a new technology or service is in the public interest. Unfortunately, the Commission has failed to abide by this deadline in the past. I have placed the Commission's Office of Engineering and Technology in charge of enforcing compliance with section 7.

I also believe that the Commission should consider establishing deadlines for resolving applications for review, petitions for reconsideration, and waiver requests.

Question 6. Will you commit to acting on the applications pending at the FCC for Peninsula Communications, Inc. as soon as possible?

Response: Yes.

It is my understanding that environmental assessments (EAs), when required under the FCC's rules, are currently not subject to any processing timelines or dispute resolution procedures. As a result, environmental assessments for new facilities can languish for an extended period of time—sometimes years. This is an unfortunate barrier to feeding our nation's hunger for expanded wireless broadband. Given my seat on this committee and on EPW, I have a particular interest in finding ways to streamline these procedures.

Question 7. Will you commit to finding ways to streamline the FCC's review of environmental assessments, including through the adoption of "shot clocks" to resolve environmental delays and disputes, in addition to working on additional infrastructure reforms?

Response: Yes, I commit to seeking ways to streamline the Commission's environmental review process consistent with the public interest and our obligations under the National Environmental Policy Act and other environmental statutes. The Commission opened a rulemaking proceeding in April of this year seeking comment broadly on how we can improve and streamline our environmental review, in the context of a broader examination of regulatory impediments to wireless infrastructure deployment. The record in that proceeding closed in July, and staff are currently reviewing comments.

Question 1. Chairman Pai, some incumbent spectrum users have made private capital investments – hundreds of billions of dollars over decades – because of the certainty of and their reliance on existing spectrum usage rules. Will you ensure that these incumbent users are treated fairly should you consider changing existing spectrum usage rules?

Response: Yes. The Commission is committed to policies that promote investment, encourage innovation, and foster next generation networks. Our work toward such policies includes a commitment to fair treatment of incumbent licensees that have already built out their networks.

Question 1. I've heard from concerned constituents that some of the FCC's proposals in its AM radio proceeding could cause them to lose access to certain stations. I know FEMA has also raised concerns that these proposals could even impact the reception of Presidential alerts in times of crisis. As the Commission noted earlier in this proceeding, the issues surrounding AM radio interference protections are highly technical and necessitated additional study, yet in the Further Notice of Proposed Rulemaking, the Commission tentatively proposed rule changes to reduce interference protections for AM stations. *Could you tell me what studies the Commission has done during the proceeding to support the Commission's tentative conclusions to reduce interference protections, or are more studies required?* We want to be sure that the proposals do not harm but rather revitalize AM radio.

Response: The Commission's tentative conclusions were premised on the goal of improving AM facilities. The Commission did not undertake its own studies prior to seeking input on the proposals. As part of the record, commenters have provided studies, and other commenters have provided comments about those studies. The Commission will continue to analyze the docket, including these studies, as it considers whether to craft final rules regarding this proposal. We have not yet reached any determination as to whether additional studies are required.

Question 2. There is currently a 180-day "shot clock" that limits the length of time the FCC has to review a transaction. Unfortunately, the FCC's review in several high-profile transactions in recent years have taken longer than 180 days. The AT&T/DirecTV deal took 412 days; Comcast/Time Warner took 381 days; Sinclair/Allbritton took 361 days; and Charter/Time Warner Cable took 314 days. In each of those cases, the FCC was able to "pause" its shot clock – although in a few of those deals, the FCC *still* exceeded 180 days, even taking account of the paused shot clock. Those deals were ultimately approved. But if the FCC waits too long to complete its review, it may effectively kill a deal. *Do you agree it's concerning that a deal could die because FCC exceeds the 180-day limit on its review?*

Response: Yes, I do.

Follow up: Would you support legislation that required the FCC to complete review within 180 days or else seek an extension in court, and do you commit to working with my staff as they develop this type of legislation?

Response: I have supported codifying the 180-day shot clock in the Commission's rules, and I would be happy to work with you on legislation to enshrine it in a statute.

Question 1. As the expert agency, rather than have 50 different standards for measuring broadband speeds, isn't the FCC in the best position to determine how broadband speeds should be measured in the United States?

Response: Yes, I believe the FCC has the most technical expertise in that area.

Question 2. Doesn't the Commission already do this through its annual Measuring Broadband America Report?

Response: Yes, although I should note that not all Internet service providers participate in that program.

Question 1. Chairman Pai, there has been a lot of discussion recently about using TV white spaces to help deliver rural broadband. Can you comment on the challenges and opportunities of potentially using TV white spaces to deliver broadband to rural areas?

Response: The Commission's rules provide for unlicensed operation in TV white spaces, including in rural areas. In 2015, we revised the TV white space rules to facilitate deployments in rural areas, such as by allowing for higher power to serve longer distances. This spectrum offers excellent properties for delivering broadband over the distances typically needed to serve rural areas. For example, the signals travel long distances and overcome obstacles such as trees and rolling terrain.

One challenge is that the Commission must balance wider deployment of white space broadband services and the availability of channels for low power TV stations and translators that are displaced by the TV incentive auction. Moreover, as is the case for many nascent services, the early equipment involving TV white spaces is costly.

Question 2. Within the USF Program, the annual budget for the high cost program is $4.5 billion, the annual budget for the E-Rate program is $3.99 billion, and the annual budget for the low-income program is $2.25 billion, increasing to $2.28 billion for 2018. In light of these funding levels, and the nation's challenges in managing the cost and quality of health care, the FCC's rural health care annual budget of $400 million, minus USAC administrative expenses, which has not been changed in nearly 20 years, appears woefully inadequate. Will you work to ensure that rural health care support is adequate to meet the needs of the nation?

Response: The rural healthcare program provides important funding to eligible health care providers (HCPs) for telecommunications and broadband services necessary for the provision of health care. I deeply appreciate the importance of these HCPs serving rural communities and the need for universal service funding in making sure all Americans have access to state-of-the-art healthcare. As the son of a doctor in Kansas who often travelled many miles to see his patients, I am well aware of the difficulty so many in rural America have in getting adequate healthcare.

I have long made ensuring the viability of the RHC program for rural participants a priority. When the FCC created the Healthcare Connect Fund in 2012, I pushed the Commission to make sure that the majority of the funds were targeted at rural healthcare providers. And last December, I pushed the agency to crack down on waste, fraud, and abuse in the program to ensure sufficient funding for the many good actors that need it. I have asked Commission staff to look closely at the RHC program and to consider ways to strengthen it.

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C. 20554

Office of the Director

July 31, 2017

The Honorable Bill Nelson
Ranking Member
Committee on Commerce, Science, and Transportation
United States Senate
254 Russell Senate Office Building
Washington, D.C. 20510

Dear Senator Nelson:

Enclosed please find responses to the Questions for the Record submitted for Chairman Ajit Pai regarding his appearance before the Committee on July 19, 2017, at the hearing on his reappointment as a Member of the Federal Communications Commission.

If you have further questions, please feel free to contact me on (202) 418-2242.

Sincerely,

Timothy B. Strachan,
Director

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Questions for the Record
Ranking Member Bill Nelson
FCC Nominations Hearing
7/19/17

Question 1. Past members of the FCC have sought out the guidance of state and local elected officials on matters pending before the agency. What role does consultation with state and local governments play in your decision making?

Response: I believe that it is important for the Commission to consult with state and local governments. Indeed, during my time at the Commission, I have personally met or spoken by phone with the Governors (at the time) of Iowa, Kansas, Louisiana, Massachusetts, Nebraska, New Hampshire, New York, and South Carolina. I have also met with a wide range of local government officials, from mayors to school superintendents to sheriffs, to discuss issues of concern in their communities.

Question 2. I applaud the FCC's ongoing efforts in the incentive auction. However, applications of many rural service providers and small businesses have yet to be processed. Can you please commit to ensuring that the Commission will make processing of the remaining license applications a priority?

Response: Yes.

Questions for the Record
Senator Maria Cantwell
FCC Nominations Hearing
7/19/17

Cybersecurity

Question 1.

The FCC's 2018 budget states that the mission of the FCC includes "promoting safety of life and property through the use of wire and radio communication."

Does ensuring that our communications networks are hardened against cyber- attacks, fall into the definition of "promoting safety of life and property through the use of wire and radio communication"?

If not why not?

Response: Under the Communications Act of 1934, as amended, part of the FCC's mission is to promote "safety of life and property through the use of wire and radio communications." Communications Act § 1. And reliable, resilient, and secure commercial communications networks allow for access to critical network services like 911, emergency alerting, and National Security/Emergency Preparedness (NS/EP) communications. Such networks therefore promote the safety of life and property.

Question 2.

Does ensuring that our communications networks are hardened against cyber- attacks fall into the public safety mission of the FCC?

Response: Promoting reliable, resilient, and secure communications networks falls within the public safety mission of the FCC.

Question 3.

Will you commit to using all of the tools available to you as the Chairman of the principal agency in the federal government with expertise and regulatory authority over our communications networks, to make sure those networks are resilient and hardened against cyber threats?

Response: The FCC will do whatever we can, in consultation with other stakeholders and within the confines of our statutory authority, to promote network resiliency, reliability, and security.

Question 4.

According to Department of Homeland Security statistics, of the 290 cyber-attacks on critical infrastructure in 2016, 62 or just over 20% were on communications networks.

For each of the 62 attacks on communications critical infrastructure in 2016, please detail what the FCC involvement was and what actions the FCC took to assist in recovery and remediation.

Please include:

a. coordination is with other federal agencies and the Administration; and

b. oversight the FCC performed over carriers' that experienced cyber breaches including reporting requirements and enforcement actions; and
c. outreach or notice required or facilitated to consumers impacted by any cyber breach.

Response: We do not have sufficient information to confirm FCC involvement following the 2016 attacks cited by DHS, all of which took place before I became the Chairman. Providers submit cyber incident information directly to the Industrial Control System Cyber Emergency Response Team (ICS-CERT) within DHS. ICS-CERT maintains this information as confidential pursuant to the Protected Critical Infrastructure Information (PCII) Program. As such, this information is not shared with the FCC. Providers are obligated to report network outages to the Commission, but because the Commission lacks access to ICS-CERT's cyber incident information, we are unable to cross-reference any action we may have taken with respect to the above-referenced incidents.

Question 5.

Please detail what provisions in the Communications Act or any other legal authority you believe limit the FCC responsibility and ability to act with regard to cybersecurity policy and cyber-attacks on communications networks. Please provide legal analysis to support your assertion.

Response: It has long been the law that "an agency literally has no power to act . . . unless and until Congress confers power upon it." *Louisiana Public Service Commission v. FCC*, 476 U.S. 355, 374 (1986). With respect to cybersecurity, Congress has only given the Commission authority to engage in informal coordination with the Department of Homeland Security and other Federal agencies. *See, e.g.*, Cybersecurity Act of 2015, 6 U.S.C. §1501 *et seq*.; Critical Infrastructure Information Act of 2002, 6 U.S.C. § 131 *et seq*. and 6 U.S.C. § 148(c)(1).

However, the FCC does not have an express statutory mandate to regulate cybersecurity as a general matter. To be sure, Section 1 of the Communications Act includes a policy statement that national defense and public safety are among the agency's purposes. Communications Act § 1. But the courts have explained that "policy statements alone cannot provide the basis for the Commission's exercise" of authority. *See, e.g.*, *Comcast v. FCC*, 600 F.3d 642, 654 (D.C. Cir. 2010).

Question 6.

Please detail what language would have to appear in the Communications Act and/or other legal authorizing texts that would create a statutory mandate for the FCC to have authority over cybersecurity in the context of the nation's communications networks.

Response: There are a variety of ways in which this could be done. For example, section 2(a) of the Cybersecurity Responsibility Act of 2017, which was introduced earlier this year by Congresswoman Yvette Clarke, would give the FCC the explicit authority to promulgate rules in this area.

Media Ownership

Question 7.

In 2016, the Court of Appeals chastised the FCC for making changes to media ownership rules without the benefit of having completed statutorily mandated reviews of the media marketplace and media ownership rules that were required in 2010 and 2014. Basically the court was saying that the FCC's policy making needed to be based on data and analysis.

Given the court's guidance that any FCC changes to media ownership rules should be grounded in the type of up-to-date data and analysis required by the quadrennial review process, will you commit to completing the next quadrennial review before leading the FCC in any process that changes the existing media ownership rules?

Response: Because there were petitions for reconsideration filed of the Commission's 2016 media ownership order, the current quadrennial review is not yet complete. And in my view, the Commission should complete the current quadrennial review before starting the next one. I believe that this is quite consistent with the Third Circuit's view on the importance of the Commission completing its statutorily mandated reviews of the media ownership rules.

Question 8.

Has the Commission done data collection and analysis that would support changing or eliminating the duopoly rule, joint sales agreement rules or broadcast cross ownership rules?

If so please summarize the data and analysis here.

Will you commit to collecting data about the current media marketplace and conducting the analysis of the current media marketplace and making those findings available to the public in the context of the quadrennial review and/or report to Congress before you lead the Commission to make any changes to FCC rules that will impact the constellation of media ownership rules including: duopoly rules, joint sales agreement rules and broadcast cross ownership rules.

Response: I commit that the draft text of any order that would change the Commission's media ownership rules in the context of the quadrennial review will be made public three weeks before any Commission vote. That draft text would include analysis and data on which the Commission would be relying to justify any changes to the rules. This step would bring unprecedented transparency to the Commission's quadrennial review process; it has never been done before in *any* quadrennial review. The record in the Commission's current quadrennial review proceeding contains substantial data and analysis submitted by commenters with a variety of views on whether the current rules should be changed. Should I determine that this data and analysis supports changing the current media ownership rules, the explanation for that determination will be made public three weeks before any Commission vote in the draft text of the order.

FCC Incentive Auction Broadcaster Repack

Question 9.

Senator Shaheen and I sent a letter to the Commission in June 2016 asking that the FCC commit to providing an assessment of whether the $1.75 billion budget and 39 month timeline for the incentive auction repack are sufficient for a successful repack of the broadcasters.

Then Chairman Wheeler wrote back to us later in the year committing to provide the information to us in a timely fashion after the completion of the forward auction.

In response to QFRs after the FCC oversight hearing earlier this year you agreed to send us the information at the close of the forward auction.

I understand that the forward portion of the incentive auction is now completed and that the FCC believes that there will be a shortfall for the repack.

When can we expect a written response to our inquiry?

Response: Our fund administrator (EY, formerly Ernst & Young) and its team of engineers are currently reviewing each cost estimate submitted to the Commission by broadcasters and MVPDs and communicating with filers to gather more information and/or cost justification to determine whether the submitted costs are reasonable in accordance with the Spectrum Act. Once that review is complete in the fall, we will provide you with a full written response to your and Senator Shaheen's inquiries. Below, however, is a snapshot on where things currently stand.

The Commission has now received cost estimates from all but eight of the reimbursement-eligible broadcasters and some eligible MVPDs. On July 14, 2017, we publicly announced that the preliminary aggregate cost estimates received as of that date was approximately $2.115 billion. Estimates continue to be submitted and, in the course of review, revised, and when I testified in the House of Representatives on July 19, the aggregate total was $2.139 billion. While the estimates will continue to change as we proceed with the post-incentive auction transition process, we expect the final number to be above the $1.75 billion that Congress has provided the Commission to reimburse impacted broadcast stations and MVPDs.

As a result, unless Congress acts to raise the $1.75 billion cap, the substantial likelihood is that local broadcasters will be required to pay some portion of their repacking costs out of their own pockets. The Commission is prepared to work with Congress to address this issue.

At this time, we do not have reason to believe that the 39-month timeline will be insufficient. But there are a variety of tools at the Commission's disposal to assist stations should unforeseen circumstances prevent them from completing the repack on time.

- Six-month construction permit extensions for stations that for reasons beyond their control cannot complete the modifications to their facilities during their construction period;
- Special temporary authority (STA) to operate using a temporary facility or at lower power while they complete their tower modifications or other necessary construction; and
- An STA to operate on a channel in the TV band that is available because it was relinquished by a winning bidder in the auction.

Of course, should the facts as they develop lead us to the conclusion that the post-incentive auction transition process generally cannot be completed in 39 months, we reserve the right to extend that deadline.

Senate Subcommittee on Commerce, Science, and Transportation
Nominations Hearing – FCC (Pai, Rosenworcel, Carr)
Senator Blumenthal's Questions for the Record

All questions are directed to Chairman Pai.

Question 1.

It's been reported that the FCC may vote in September on an order on reconsideration that would roll back many media ownership regulations.

As you know, the FCC has an obligation to promote diversity and localism, and its duty to ensure that broadcasters are responsive to the needs and interests of the local community is enshrined in the Communications Act. In fact, local broadcasters tout their local news and other local services as their differentiating factor and value in the marketplace.

The Third Circuit's opinions in the *Prometheus v. FCC* line of cases have repeatedly admonished the Commission for failing to provide adequate notice of its media ownership decisions. Even more troubling, the court has repeatedly overturned the FCC when the agency has claimed that rule changes promote these important goals of localism and diversity, yet failed to consider adequately the impacts of any such rule changes. For example, in its 2011 decision the court ruled that the FCC had not yet "gathered the information required to address these challenges," and thus "failed to provide reasoned analysis to support" changes to the FCC's cross-ownership rules and other local ownership limits.

Accordingly, I am shocked you would consider going forward with such a vote affecting media ownership regulations without a full, up-to-date Quadrennial Review. And I am even more shocked that you appear to have abandoned your own views on this subject, espoused before you became Chairman and took control over such process decisions, when you seemed to have more regard for those processes designed to ensure full and fair consideration of such questions. In your dissent from the prior Commission's joint sales agreement attribution decision, for example, you said that "the Commission abdicates its legal obligation to review our media ownership regulations every four years" when "[i]t arbitrarily singles out one aspect of those regulations . . . and changes our policies in a way that ignores the realities of the modern media marketplace, [and] will harm localism and diversity[.]"

While you may contend that the record from the last Quadrennial Review would be sufficient for action on reconsideration, the reality is that with the incentive auction, proposed broadcast TV mergers, and other changes in the broadcasting landscape much has changed since that record was developed. Any revision of media ownership regulations should go through a fully transparent and robust notice and comment process, as you have long stated, and be based on an accurate, current picture of the broadcasting landscape.

Do you commit to conducting a new, full, and open Quadrennial Review of the Commission's broadcast ownership rules before proceeding with any action that would affect the FCC's current media ownership rules?

How would you make sure that any changes would not hurt localism, diversity, or competition in broadcast television?

Response: Because there were petitions for reconsideration filed of the Commission's 2016 media ownership order, the current quadrennial review is not yet complete. And in my view, the Commission should complete the current quadrennial review before starting the next one.

I commit that the draft text of any order that would change the Commission's media ownership rules in the context of the quadrennial review will be made public three weeks before any Commission vote. That draft text would include analysis and data on which the Commission would be relying to justify any changes to the rules. This step would bring unprecedented transparency to the Commission's quadrennial review process; it has never been done before in *any* quadrennial review.

Before deciding to change any of its media ownership rules, the Commission will assess the impact of that change on the values that the rule in question is designed to advance, whether it be localism, diversity, and/or competition.

Question 2.

Chairman Pai, during your recent visit with me, we had a good conversation about what localism means. As you know, the FCC's obligation to promote diversity, localism, and ensure that broadcasters are responsive to the needs and interests of the local community is enshrined in the Communications Act.

What do you believe are the attributes of localism? How do you define localism?

Response: A broadcast station advances localism when it airs programming that is responsive to the needs and interests of the community which it is licensed to serve.

Question 3.

As I recall, in our recent conversation, you stressed the importance of broadcasters being able to determine news important to the local community.

If a company with broadcast properties required local affiliated stations to air content during its news programming unconnected to the local community, would you agree that such practices undermine localism?

Would you agree that any such content should be clearly identified as national "must-run" content? Would a company's failure to do so implicate any FCC rules?

If such a company were to endeavor to acquire additional broadcast properties, would you consider such practices requiring certain "must-run" content relevant to the FCC's review of that merger under your obligations to protect and promote localism?

Response: The FCC's rules do not require local affiliates to identify national "must-run" content, and I am not aware any proposal currently under consideration to mandate such identification.

Local television newscasts generally feature a mix of local and national news, so I do not believe that any news content focusing on national issues by definition undermines localism. I do agree, however, that there could come a point at which the amount of nationally-focused content in a local newscast could undermine localism.

Any broadcast licensee is required to air programming that is responsive to the needs and interests of the community to which it is licensed, and a licensee's failure to comply with that requirement would be relevant to the Commission's review of a transaction.

Question 4.

During this nominations hearing, you said you were not familiar with an interpretation of Section 706 requiring the FCC to know Internet speeds being deployed by companies.

In fact, Section 706 of the Telecommunications Act of 1996 requires the FCC to report annually on whether "advanced telecommunication capability is being deployed…" and "advanced telecommunications capability" is defined as "*high-speed* [emphasis added], switched, broadband telecommunications capability…" Accordingly, to accurately conduct such a report, the FCC must know whether companies are indeed offering telecommunication capability that qualifies as "high-speed."

How is the FCC able to fulfill its obligation to conduct its review pursuant to Section 706 if we cannot trust companies to tell the truth about the Internet speeds that they are being deployed?

Response: The Commission's Section 706 proceedings for many years have relied on data collected in our Form 477, as well as other data sources. Form 477 data provides a wealth of information on the types and speeds of broadband connections deployed by virtually all Internet service providers in the United States. This information is certified as accurate in accordance with our rules by officials in each company and anyone making willful false statements in a Form 477 can be punished by fine or imprisonment under the Communications Act. Going forward, I anticipate the Commission will continue to rely heavily on Form 477 data as part of our statutory duty under Section 706. And on August 3, the Commission will be voting on proposals to improve the accuracy of the Form 477 data we collect.

Question 5.

Chairman Pai, in your April 2017 statement on the Business Data Services Market, you describe a new "competitive market test" that considers a particular county competitive if "50% of the locations with BDS demand in that county are within a half-mile of a location served by a competitive provider or 75% of the census blocks in that county have a cable provider present."

Essentially, that means if a church in Hartford has only one choice, but there's another provider a few miles away, there's nothing for the Commission to do. Potential competition isn't competition.

Can you explain your competition philosophy? Is it your position that the agency should not protect consumers even when there is a monopoly? Do you believe a duopoly is sufficient?

Response: My competition philosophy is informed by a few simple principles. Consumers benefit most from competition, not preemptive regulation. Free markets have delivered more value to American consumers than highly regulated ones. No regulatory system should indulge arbitrage; regulators should be skeptical of pleas to regulate rivals, dispense favors, or otherwise afford special treatment. Particularly given how rapidly the communications sector is changing, the FCC should do everything it can to ensure that its rules reflect the realities of the current marketplace and basic principles of economics. Rules that reflect these principles will result in more innovation, more investment, better products and services, lower prices, more job creation, and faster economic growth.

Where a market lacks competition, I do believe the Commission should intervene in appropriate circumstances. The record in the Business Data Services Market showed many providers are willing to build out at least by a half-mile, with some going further. What's more, there's strong competition well within the half-mile threshold; about half of buildings with demand are within 88 feet of competitive fiber facilities, and 75% are within 456 feet. Those facts, in addition to millions of observations from one of the largest data collections the Commission has ever conducted, are why the Commission concluded that

sufficient facilities-based competition near a location serve to discipline prices. And to ensure that every consumer is protected, the Commission maintained a tried-and-true safety valve in markets deemed competitive. Sections 201 and 202, along with the section 208 complaint process, will continue to serve as safeguards against any attempts by incumbents to charge unjust or unreasonable rates for common-carriage DS1 and DS3 services.

Questions for the Record
Senator Brian Schatz
FCC Nominations Hearing
7/19/17

For FCC Chairman, Ajit Pai (incentive auction)

Question 1.

Last week the FCC announced that the estimated cost to repack the TV band would be approximately $2.11 billion dollars, which is approximately $365 million more than the $1.75 billion Congress included in the Television Broadcaster Relocation Fund. Given this shortfall, is additional funding necessary to ensure that repacked television stations are not forced to go out of pocket or cover their costs?

Response: We have begun our careful examination of the submissions received to date. The initial aggregate estimate is subject to change due to factors such as the agency's review, as well as the fund administrator's review, of estimates and revisions made by eligible entities, but the agency expects the final number to be above the $1.75 billion that Congress has provided the Commission to reimburse impacted broadcast stations and MVPDs. As a result, unless Congress acts to raise the $1.75 billion cap, the substantial likelihood is that local broadcasters will be required to pay some portion of their repacking costs out of their own pockets. I am prepared to work with Congress to address this issue.

Question 2.

Could you explain what happens to a broadcaster if, through no fault of their own, it cannot complete channel relocation in the time allotted during the repacking process following the incentive auction?

Response: I do not believe that any broadcaster should be forced off the airwaves through no fault of its own during the post-incentive auction transition process. And we have a number of tools at our disposal to prevent this from happening.

- Six-month construction permit extensions for stations that for reasons beyond their control cannot complete the modifications to their facilities during their construction period;
- Special temporary authority (STA) to operate using a temporary facility or at lower power while they complete their tower modifications or other necessary construction; and
- An STA to operate on a channel in the TV band that is available because it was relinquished by a winning bidder in the auction.

The STA process worked well during the DTV transition and should allow stations to continue to serve their communities if unforeseen circumstances arise.

Of course, should the facts as they develop lead us to the conclusion that the post-incentive auction transition process generally cannot be completed in 39 months, we reserve the right to extend that deadline. However, given current facts, we have reached no such conclusion.

Question 3.

When do you expect to have the final analysis of the reimbursement request?

Response: The review of initial cost estimates involves a multi-step process that balances the Commission's need to ensure responsible stewardship of public funds with ensuring the timely

availability of funds for entities incurring relocation costs. We expect that the fund administrator's review of initial cost estimates will be completed in mid-September, after which time we will analyze the data to calculate an initial allocation. We expect to begin making reimbursement payments early in the fourth quarter of this calendar year. Additional cost estimates and changes to estimates will continue to be submitted throughout the transition period and we will conduct a similar review of such changes. We will also review invoices for actual costs incurred. It is therefore not possible to know the precise amount of the aggregate total costs until the last invoice is submitted and approved at the end of the transition.

Questions for the Record
Senator Ed Markey
FCC Nominations Hearing
7/19/17

Question 1. Earlier this year, the majority of the Commission indicated that a market is competitive where only one provider has service, and potentially a second provider may enter the market. Do you take the position that the agency should not regulate when there is a monopoly? What is your view on duopoly and what actions should the agency take? What is your plan to evaluate, on an ongoing basis, conditions in business data services?

Response: Where a market lacks competition, I do believe the Commission should intervene in appropriate circumstances. The record in the Business Data Services Market showed many providers are willing to build out at least by a half-mile, with some going further. What's more, there's strong competition well within the half-mile threshold; about half of buildings with demand are within 88 feet of competitive fiber facilities, and 75% are within 456 feet. Those facts, in addition to millions of observations from one of the largest data collections the Commission has ever conducted, are why the Commission concluded that sufficient facilities-based competition near a location serve to discipline prices. And to ensure that every consumer is protected, the Commission maintained a tried-and-true safety valve in markets deemed competitive. Sections 201 and 202, along with the section 208 complaint process, will continue to serve as safeguards against any attempts by incumbents to charge unjust or unreasonable rates for common-carriage DS1 and DS3 services.

Going forward, the Commission plans to evaluate conditions in the business data services market at least every three years.

Questions for the Record
Senator Cory Booker
FCC Nominations Hearing
7/19/17

WJLP

Question 1. WJLP, northern New Jersey's only VHF television broadcast station, has been ordered by the FCC to identify itself as channel 33 instead of its real channel, channel 3. Applications for review of numerous rulings related to this issue have been submitted with no action for up to three years. It is my understanding that contested cases can take up to seven years to reach a determination. What actions have you taken, and what actions will you take if re/confirmed, to reach a final determination on this case?

Response: The two Applications for Review filed regarding the issues related to WJLP are restricted proceedings. However, I can say that Commission staff are actively reviewing the issues raised, and the Commission will reach a final determination in these cases as soon as feasible.

Question 2. E-Rate is an important Universal Service Fund program that helps underserved schools and libraries connect to high-speed Internet. I cannot overstate the value of broadband access for these learning centers. To remain competitive in the 21st century, our children must learn how to interact with the digital world.

In 2016, my home state of New Jersey received $90 million for E-Rate, which it used to connect 181,652 students to high-speed Internet in underserved schools.[1] For these students, especially those who do not have access to broadband at home, this a potentially life-changing advance in educational opportunity. This program is critical to closing the digital divide.

Nationally, since the E-Rate Modernization Order in 2014, 30.9 million unserved students have been connected to the high-speed broadband that they need to build our nation's future.

Will you commit to support the E-rate modernization order in its current form with need-based prioritized funding for underserved schools and libraries?

Response: I am deeply committed to doing everything within the FCC's power to close the digital divide. I believe an effective E-rate program—one that promotes better connectivity for students and library patrons alike—can be a powerful tool to help bridge that divide. This is why, four years ago, I said that "E-rate is a program worth fighting for."

Unfortunately, there have been serious flaws in the administration of the E-rate program, specifically related to the process by which schools and libraries to apply for E-rate funding, that are preventing many schools and libraries from getting that funding. I have asked USAC to provide a detailed report on plans to fix the existing problems so it can administer the E-rate program in a manner that is fully compliant with our rules and that works for applicants and participants.

At this point, I believe that our focus should be on cutting unnecessary red tape and making it easier for schools and libraries to participate in the E-rate program.

[1] Education Superhighway, July 2017.

Telecommunications Accessibility

Question 3. The New Jersey Division of the Deaf and Hard of Hearing (DDHH) estimates that there are approximately 850,000 New Jersey residents who experience hearing loss. Many of these individuals rely on Video Relay Service (VRS) and Internet Protocol Captioned Telephone Service (IP CTS) to communicate with family, friends, emergency services, and other important people. How will you ensure that the FCC continues to administer these programs consistent with the requirements of the Americans with Disabilities Act?

Response: Since day one of my Chairmanship, I've said the Commission has no higher calling than extending digital opportunity to all Americans. Every citizen who wants to participate in our digital economy and society should be able to do so—no matter who you are.

Communications technology has awe-inspiring power to open doors that have too-long been closed to Americans with disabilities. Last week marked the 27th anniversary of the ADA becoming the law of the land. This landmark legislation gave the FCC a mandate to ensure access to telecommunications by Americans with hearing and speech disabilities. It's critical that the Commission fulfill its legal obligation under Title IV of the ADA to ensure that nationwide telecommunications relay services are available to people who are deaf, hard of hearing, deaf-blind, or who have a speech disability.

That's why the FCC is seeking to improve video relay services (VRS), which can be critical to allowing people who are deaf, hard-of-hearing, or speech-disabled to make calls over broadband using American Sign Language and a videophone. For example, we have authorized a trial that will allow VRS users to request interpreters that are skilled in specialized vocabulary, such as legal, medical, and technical computer matters, to make communication on their relay calls more effective (something I had pushed for since 2013). In addition, we are in the process of establishing performance goals and metrics to ensure the high quality of the relay services we support. I'm committed to making sure that technological inclusion is the norm, rather than the exception. I look forward to working with my colleagues on further steps to ensure that deaf and hard-of-hearing individuals are provided with functionally equivalent communications services.

TV White Spaces

Question 4. Expanding access to broadband connectivity is an incredibly important part of investing in the future of our nation and closing the digital divide. This is especially true in rural areas. How do you view the role of TV White Spaces in expanding connectivity to hard-to-reach rural areas?

Response: The Commission's rules provide for unlicensed operation in the TV white space, including in rural areas. In 2015, we revised the TV white space rules to facilitate deployments in rural areas such as by allowing for higher power to serve longer distances. And earlier this month, I had the opportunity to visit South Boston, Virginia, to learn about how the TV white space is being used to provide connectivity to families in that community. This is an issue that I am following closely as we need to look at creative ways to provide connectivity in hard-to-reach rural areas.

Questions for the Record
Senator Tom Udall
FCC Nominations Hearing
7/19/17

1) The FCC and this Committee have been talking about the need to build out rural broadband for many years. Progress is happening, but much too slowly. The free market did not deliver rural electricity—FDR, the New Deal, and the rural electric coops did it with major USDA support. The free market will not deliver rural broadband on its own either. We need the government to act. If there is going to be an infrastructure package, rural broadband must be in it in a very big way. Will you work with both parties in Congress, and the White House, to advance a consensus, bipartisan proposal to provide rural broadband to every part of America that is bold – and provides the necessary funding to achieve this goal?

Response: Yes.

2) Chairman Pai, internet service providers and consumer advocacy groups have been weighing in on the Commission's proposal to eliminate the Open Internet Order and reclassify broadband as an information service. Can you tell me if the Commission is considering any other proposals that would provide similar legal and regulatory net neutrality protections?

Response: In the *Restoring Internet Freedom Notice of Proposed Rulemaking*, the Commission sought comment on any sources of legal authority for rules in this area other than Title II. Once the comment cycle closes, we will carefully review the proposals along these lines that are submitted into the record.

U.S. SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
NOMINATIONS HEARING FOR. MR. AJIT PAI, MR. BRENDAN CARR,
AND MS. JESSICA ROSENWORCEL
JULY 19, 2017

QUESTIONS FOR THE RECORD
SENATOR TAMMY DUCKWORTH

Question for Chairman Pai:

Question 1. Chairman Pai, in a presentation to investors about its Bonten and Tribune transactions, Sinclair stated that the transactions would give it "72% household coverage across 108 markets." In 2004, Congress enacted the Consolidated Appropriations Act (P.L. 108-199) that directed the FCC to adopt rules that would cap the reach of a single company's television stations to 39% of U.S. television households. Last April, the FCC reinstated the UHF discount regulation, which, for purposes of this national ownership cap, discounts the reach of UHF stations by 50%. In September of last year, the FCC under then-Chairman Wheeler eliminated this discount. What authority does the FCC have to change the national ownership cap and UHF cap either separately or in conjunction with one another?

Response: I believe that the Commission is required to review the national ownership cap and the UHF discount in a holistic manner since they are inextricably linked. In the prior Administration, the Commission concluded that it had the authority to modify the national ownership cap and eliminate the UHF discount. The Commission will be seeking comment on both of those conclusions later this year when we initiate a rulemaking proceeding about the national ownership cap.

Question 2. In August 2016, the FCC adopted new disclosure requirements for all joint operating agreements, broadly encompassed by the term "shared services agreements" (SSAs) among broadcast television stations. Subject to approval by the Office of Management and Budget (OMB), each station that is a party to an SSA, whether in the same or different television markets, would have been required to file a copy of the SSA in its online public inspection file. Did the FCC withdraw its request to OMB to approve the collection of information regarding SSAs on January 27, 2017, and if so, why? Does the FCC plan to resubmit its request to OMB?

Response: Yes, the FCC withdrew its request to OMB to approve the collection of information regarding SSAs so that the Commission could consider a Petition for Reconsideration regarding that collection. Depending on the decision that the Commission makes regarding that Petition for Reconsideration, the OMB approval process may be restarted.

Question 3. In March 2014, the FCC's Media Bureau issued a public notice stating that it will closely scrutinize any proposed transaction that includes "sidecar" agreements. In such agreements, two (or more) broadcast stations in the same market enter into an arrangement to share facilities, employees, and/or services, or to jointly acquire programming or sell advertising and enter into an option, right of first refusal, put/call arrangement, or other similar contingent interest, or a loan guarantee. In February 2017, the FCC's Media Bureau rescinded this guidance. Among the 10 markets in which Sinclair states in its FCC merger application it would need to divest stations in order to comply with the FCC's media ownership rules, is the St. Louis television market, which includes more than a dozen Illinois counties. Would the FCC approve a divestiture to a "sidecar" station?

Response: It would not be appropriate for me to speculate at this time about a transaction pending in front of the Commission.

Question 4. More than eight million comments were filed during the initial comment period for the 2017 Open Internet proceeding. During the 2017 Open Internet comment period, the FCC's electronic comment filing system was subjected to multiple distributed denial-of-service attacks. Do you believe these attacks may have kept some portion of comments from being recorded? In light of these attacks, do you believe that the FCC's information technology and cybersecurity practices are adequate? If not, what actions would you recommend to improve them?

Response: We have had more than 13 million comments filed in the Restoring Internet Freedom docket at this juncture, and I am confident that the American people are being provided with ample opportunity to participate in this proceeding. Following the disruption on May 7-8, the Commission's career IT professionals have taken a number of steps to minimize the chances of a similar disruption occurring in the future, and the Commission's electronic comment filing system has been working well. We will continue to monitor the situation closely and effectuate upgrades as necessary going forward to maintain and improve the resiliency of our systems. It is important to recognize, however, that the disruption that occurred on May 7-8 did not involve a breach of the Commission's systems and that our security systems functioned appropriately on those days.

Committee on Commerce, Science, and Technology
FCC Nomination Hearing
July 19, 2017
Senator Maggie Hassan
Questions for the Record

Question 1. To Chairman Pai:-The E-Rate program is critical to achieving our goals in regards to connectivity in schools and libraries, and the expansion has helped advance those goals. I have heard concerns from educators in my state that if confirmed you may take aim at this critical program which has been successful in connecting numerous students in New Hampshire and across the country. Will you commit to maintaining the E-Rate Program at least its current funding levels? Can you commit to waiting an adequate amount of time so that the Commission can see how effective the latest changes to the program have been?

Response: I am deeply committed to doing everything within the FCC's power to close the digital divide. I believe an effective E-rate program—one that promotes better connectivity for students and library patrons alike—can be a powerful tool to help bridge that divide. This is why, four years ago, I said that "E-rate is a program worth fighting for."

Unfortunately, there have been serious flaws in the administration of the E-rate program, specifically related to the process by which schools and libraries apply for E-rate funding, that are preventing many schools and libraries from getting that funding. I have asked USAC to provide a detailed report on plans to fix the existing problems so it can administer the E-rate program in a manner that is fully compliant with our rules and that works for applicants and participants.

Currently, my focus is on reducing unnecessary red tape and making it easier for schools and libraries to apply for the program and receive funding.

Question 2. To Chairman Pai: A robust emergency alert system is incredibly important in reaching our nation's citizens in time of a crises or natural disaster. I have heard from our local broadcasters that there is great potential enhanced information delivery capabilities ATSC 3.0 (Next Gen TV) will be able to provide to the public, during an emergency situation such as a major flood or hurricane. Could you provide an update on timing for completion of this proceeding?

Response: The record in this proceeding recently closed. We are reviewing that record currently. Our goal is to issue rules in this proceeding by the end of the year.

Question 3. To the Panel: As you know, pursuant to the Americans with Disabilities Act, the FCC has an important mandate to ensure that deaf and hearing-impaired individuals have "functionally equivalent" access to telecom services. How will you work to ensure that the commission fulfils its obligation to individuals with hearing impairments under the ADA?

Response: Since day one of my Chairmanship, I've said the Commission has no higher calling than extending digital opportunity to all Americans. Every citizen who wants to participate in our digital economy and society should be able to do so—no matter who you are.

Communications technology has awe-inspiring power to open doors that have too-long been closed to Americans with disabilities. Last week marked the 27th anniversary of the ADA becoming the law of the

land. This landmark legislation gave the FCC a mandate to ensure access to telecommunications by Americans with hearing and speech disabilities. It's critical that the Commission fulfill its legal obligation under Title IV of the ADA to ensure that nationwide telecommunications relay services are available to people who are deaf, hard of hearing, deaf-blind, or who have a speech disability.

That's why the FCC is seeking to improve video relay services (VRS), which can be critical for people who are deaf, hard-of-hearing, or speech-disabled to make calls over broadband using American Sign Language and a videophone. For example, we have authorized a trial that will allow VRS users to request interpreters that are skilled in specialized vocabulary, such as legal, medical, and technical computer matters, to make communication on their relay calls more effective (something I had pushed for since 2013). In addition, we are in the process of establishing performance goals and metrics to ensure the high quality of the relay services we support. I'm committed to making sure that technological inclusion is the norm, rather than the exception. I look forward to working with my colleagues on further steps to ensure that deaf and hard-of-hearing individuals are provided with functionally equivalent communications services.

Questions for the Record
Senator Catherine Cortez Masto
FCC Nominations Hearing
7/19/17

Question 1. **Federal Siting for Telecom Services on Public and Tribal Lands**

- While we discussed federal siting issues in relations to your Broadband Deployment Advisory Committee in the hearing, I just wanted to follow-up on confirming some specific details.
- Can you please commit to setting a date for public display of these recommendations for federal siting improvements?
- Have you invited the Interior Department to these meetings, and have they been participating?
- What other federal agencies have you specifically invited to participate in your advisory committee's activities?

Response: The Broadband Deployment Advisory Committee (BDAC) is a crucial component in the FCC's efforts to close the digital divide. The mission of the BDAC includes making recommendations that would accelerate the deployment of high-speed Internet access in communities across the country. The BDAC is comprised of a distinguished group of 30 innovators and leaders who have been working to bring broadband and next-generation networks to all parts of our nation. The BDAC is on pace to deliver an initial set of recommendations by the end of the year, and we expect more recommendations to follow in 2018. Like the recommendations of our other federal advisory committees, we expect these recommendations to be available to the public.

As you mention, one important area of focus for the BDAC is federal siting issues. We just recently got confirmation that the Department of the Interior, the Department of Agriculture, and the Bureau of Land Management will participate in the BDAC working group on federal siting issues, and we will launch it as soon as possible.

Question 2. **Chairman Pai's Proposal for an FCC Office of Economics and Data:** As we discussed in our meeting, I have interest in the Office of Economics and Data (OED) you've proposed for the Commission.

- While I have written to you with additional questions about this proposal, I know you've committed to providing Congressional Appropriators your plan, and I would request that you respectfully provide the plan to myself and the members of the Senate Commerce Committee.
- And specifically, in regards to this new office, can you explain how this OED office will work in coordination with the public interest standard statutorily required of the FCC that reviews transactions on a basis beyond "purely economic outcomes"?

Response: You have my commitment to provide a final reorganization plan to the Committee and otherwise notify the Committee of our progress. I have not yet received the final recommendations from the working group that is studying the issue of how to structure the Office of Economics and Data. But I hope that the proposed OED will be on par with the Office of Engineering and Technology (OET) and coordinate with other bureaus and offices within the Commission's organizational structure. One of my goals is for the reorganization to elevate the importance of economic analysis within the Commission. The existence of this office, however, will not in any way change our emphasis on a broad range of issues that inform our overall analyses, from consumer protection to sound engineering analysis. Economics is one tool in the analytic toolbox; it is not the only tool.

Question 3. **Diversity in Telecom:** After our last hearing, I asked you in writing about concerns with diversity in the telecom industry, from gender, to ethnicity. You mentioned that you did not have the statutory authority to impose equal employment opportunity rules on Silicon Valley tech firms, as you have at your disposal for broadcasters and cable operators.

- Have you utilized this authority for broadcasters and cable operators during your tenure as Chairman, or your entire time at the FCC?
- And two, would you support having that kind of authority to ensure we can create a wider exposure of those jobs, opportunities, and thought to such an important industry?

Response: With respect to your first question, the answer is yes. For example, the Media Bureau this year has already sent out two sets of Equal Employment Opportunity (EEO) audit letters covering over 300 broadcast stations to examine whether these broadcasters are complying with the Commission's EEO rules. With respect to your second question, I would defer to Congress on whether the FCC should have this statutory authority. However, I do believe that FCC's Advisory Committee on Diversity and Digital Empowerment could study why many companies in Silicon Valley appear to have a less diverse workforce than broadcasters and cable operators.

Question 4. **Working to Bridge the Divide:** In relation to the FCC, we've all heard from the Senate Commerce Chairman, as well as you yourself, concerns related to the repeated, or all too common, party line votes that take place at the Commission.

- Would you agree it would serve us all better if we could get to more consensus and work together in the messages and policies you put forth at the FCC?
- If reconfirmed, how will you bridge this apparent divide at the FCC?
- How will you work with ALL of your fellow Commissioners to find common ground, to get 4-1 or 5-0 votes on the Commissions actions?

Response: The answer to your first question is yes. With respect to your second and third questions, I plan to continue working with my colleagues whenever possible to find common ground. Unfortunately, there will always be some issues where it is not possible to reach unanimity. But I firmly believe that with respect to the substantial majority of the issues we face, it is possible to find common ground so long as Commissioners are willing to engage in good faith and make reasonable compromises so that the perfect does not become the enemy of the good.

I'm pleased to report that this approach appears to be working this year. For example, under the prior Chairman, only 48% of meeting items were adopted with no dissenting votes. But since I have become Chairman, 76% of meeting items have been adopted with no dissenting votes.

Question 5. **E-Rate:** I'm deeply concerned about your noncommittal stance towards e-rate and any future plans you have for the program.

- Are you considering reducing funding for E-rate?
- And, are you considering major changes to E-rate?

Response: I am very committed to doing everything within the FCC's power to close the digital divide. I believe an effective E-rate program—one that promotes better connectivity for students and library patrons alike—can be a powerful tool to help bridge that divide. This is why, four years ago, I said that "E-rate is a program worth fighting for."

Unfortunately, there have been serious flaws in the administration of the E-rate program, specifically related to the process by which schools and libraries apply for E-rate funding, that are preventing many schools and libraries from getting that funding. I have asked USAC to provide a detailed report on plans to fix the existing problems so it can administer the E-rate program in a manner that is fully compliant with our rules and that works for applicants and participants.

My immediate focus is on trying to reduce unnecessary red tape and make it easier for schools and libraries to apply for the program, not on examining the program's funding level.

Questions for the Record
FCC Nominations Hearing
Senator Amy Klobuchar
July 19, 2017

Question 1. A provision based on my Rural Spectrum Accessibility Act – that I introduced last Congress with Senator Fischer – was included in the MOBILE NOW Act that passed the Senate Commerce Committee in January. This provision would require the Federal Communications Commission to explore ways to provide incentives for wireless carriers to lease unused spectrum to rural or smaller carriers in order to expand wireless coverage in rural communities. Chairman Pai, what incentives could be useful to encourage large carriers to lease spectrum to smaller, rural carriers?

Response: The Commission's spectrum licensing rules, including its rules for leasing spectrum, are intended to lower regulatory barriers to spectrum leasing for small and rural carriers. Our rules also provide parties with great flexibility in the partitioning and disaggregation of licensed spectrum. We will continue to explore ways to eliminate unnecessary rules and regulatory barriers and to provide incentives to expand wireless coverage in rural communities to deliver mobile broadband to all Americans.

In addition, because deployment by rural carriers on leased spectrum counts toward the primary licensee's construction benchmark, adopting and enforcing meaningful construction requirements that require licensees to build out in rural parts of their license area in order to keep their license at the end of the license term incentivizes carriers to lease spectrum to rural carriers in order to satisfy their build-out requirements.

Again, I think that we need to continue to think about further steps that we can take to encourage rural buildout. For instance, in my September 2016 speech outlining my Digital Empowerment Agenda, I proposed to substantially increase the buildout obligations associated with initial licenses and extend license terms from 10 to 15 years. This would both increase rural coverage and also make build out more economically feasible for carriers by providing an additional five years of certainty.

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C.20554

Office of the Director

September 27, 2017

The Honorable Marsha Blackburn
Chairman
Subcommittee on Communications and Technology
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Blackburn:

Enclosed please find responses to Questions for the Record submitted for Chairman Ajit Pai regarding his appearance before the Subcommittee on Communications and Technology on July 25, 2017, at the hearing entitled "Oversight and Reauthorization of the Federal Communications Commission."

If you have further questions, please contact me at (202) 418-2242.

Sincerely,

Timothy B. Strachan
Director

Additional Questions for the Record

The Honorable Gus M. Bilirakis

1. **The FCC is currently proposing rules that would give service providers more authority to block certain types of illegal robocalls. That way, many of these calls never reach the consumer. Some legitimate callers, such as healthcare providers, who want to make legal robocalls with consumer consent, are concerned that their calls might be blocked as well.**

    a. **What is your opinion on the rights legal callers have, if any, to ensure their calls are successfully completed?**

Response: Lawful callers have every right to expect that the calls they place will be successfully completed. The Commission has had a long-standing policy of ensuring that phone networks work seamlessly and that the Telephone Consumer Protection Act and carriers' blocking of unlawful robocalls do not prevent legitimate callers from reaching consumers. In the *Call Blocking Notice of Proposed Rulemaking/Notice of Inquiry*, the Commission sought public input on how we can best protect consumers from illegal robocalls while ensuring that lawful calls – including those from healthcare providers – are received by consumers. For example, we sought comment on allowing carriers to block calls where the Caller ID is spoofed so that the call appears to be coming from an invalid or unassigned phone number. It is extremely difficult to see why a legitimate caller would engage in such spoofing. Moreover, we sought comment on establishing a mechanism for legitimate callers to proactively avoid having their calls blocked. The Commission also sought comment on implementing a process to allow legitimate callers to notify voice providers when their calls are blocked and to require voice providers to cease blocking such calls immediately. With appropriate protections for legitimate callers, we can achieve our ultimate goal in this proceeding of ensuring that consumers receive fewer illegal robocalls while also preserving the ubiquity and reliability of the nation's communications network.

2. **The Commission is currently considering potentially creating a "reassigned number" database so that legitimate robocallers who want to call a particular person can avoid accidentally calling the wrong person if the intended recipient has given up his phone number and it has been reassigned to someone else.**

    a. **What do you perceive as the possible benefits resulting from such a data base?**

Response: A business or other robocaller unknowingly calling a reassigned number can annoy the new consumer, deprive the previous consumer of an expected call, and subject the caller to potential legal liability. With the *Reassigned Number Notice of Inquiry* (*NOI*), the Commission took an important first step to address the issue of robocalls to reassigned phone numbers by exploring ways that businesses can verify whether a number has been reassigned prior to initiating a call. Specifically, the *NOI* sought public comment on the best way to structure a useful, cost-effective database that businesses, schools, and the like can use to avoid accidentally calling numbers that are no longer used by the consumer who gave their consent to receive these calls. Establishment of a comprehensive resource with an up-to-date list of reassigned numbers enjoys broad support among businesses and consumer advocates alike, and will benefit

consumers by ensuring that callers do not continue to place calls without realizing the number has switched hands. The Commission may move forward on further actions such as rulemakings based on the input we receive in response to the *NOI*.

The Honorable Susan W. Brooks

1. **You recently proposed to add a Blue Alert code to the Emergency Alert system. Could you describe what this does?**

Response: On June 22, 2017, the Commission adopted a Notice of Proposed Rulemaking (NPRM) that proposed to add an alert option to the nation's Emergency Alert System (EAS) to help protect the nation's law enforcement officers. Called a "Blue Alert," the option would be used by authorities in states across the country to notify the public through television and radio of threats to law enforcement and to help apprehend dangerous suspects.

Blue Alerts can be used to warn the public when there is actionable information related to a law enforcement officer who is missing, seriously injured or killed in the line of duty, or when there is an imminent credible threat to an officer. A Blue Alert could quickly warn people if a violent suspect may be in their community, along with providing instructions on what to do if they spot the suspect and how to stay safe.

The NPRM proposes to amend the FCC's EAS rules by creating a dedicated Blue Alert event code so that state and local agencies have the option to send these warnings to the public through broadcast, cable, satellite, and wireline video providers. Comments on this proposal were due on July 31, 2017, and replies were due on August 29, 2017. The Commission is currently evaluating the record to determine next steps.

2. **Your staff recently briefed the Committee on a 911 outage that occurred last March. The FCC did a report. I understand that the cause of that outage was attributable to "human error" but there are always lessons to be learned. The report also concluded that there the need for close working coordination between industry and PSAPs to improve overall situational awareness and ensure consumers understand how best to reach emergency services and the FCC was going to engage on this issue.**

    a. **What has the Public Safety Bureau done since it made this recommendation to address this issue?**

Response: The March 8, 2017 AT&T Mobility Voice-over LTE 911 outage exemplified the need for continuing coordination between industry and public safety answering points (PSAPs) to improve situational awareness during 911 outages, and for ongoing efforts to improve network reliability. Accordingly, the Bureau's Final Report committed to taking three next steps to address these issues: (1) release a Public Notice to remind industry of the importance of network reliability best practices; (2) conduct stakeholder outreach to promote these best practices; and (3) convene consumer groups, public safety entities, and service providers in the 911 ecosystem to participate in a workshop in order to discuss best practices and develop recommendations for improving situational awareness during 911 outages. The Bureau has completed each of these steps, as described below.

On July 13, 2017, the Bureau released a Public Notice encouraging communications service

providers to take measures to improve network reliability to prevent major service disruptions. The Commission's Federal Advisory Committee, the Communications Security, Reliability, and Interoperability Council (CSRIC), recommended the best practices that the Public Notice highlighted. The Public Notice also provided the industry with lessons learned from the Bureau's analysis of Network Outage Reporting System (NORS) reports on recent outages.

The Bureau used this Public Notice as a basis for stakeholder outreach to raise and reinforce awareness about network reliability best practices and lessons learned. The Bureau reached out to major service providers required to file in NORS, such as Verizon and T-Mobile, to small carrier associations, such as the Competitive Carriers Association and NTCA – The Rural Broadband Association, and to the Alliance for Telecommunications Industry Solutions's Network Reliability Steering Committee.

Finally, on September 11, 2017, the Bureau convened consumer groups, public safety entities and service providers in the 911 ecosystem to participate in a workshop. The workshop consisted of two roundtable discussions. The first roundtable focused on identifying best practices for communicating outage information among service providers and PSAPs. The second roundtable focused on identifying best practices for communicating 911 outage information to the public. The Bureau is currently evaluating the record from the workshop and identifying next steps to build upon the best practices discussed during the roundtables. The Bureau intends to present the Office of the Chairman with its recommendations within the next 60 days.

The Honorable Brett Guthrie

1. **During the hearing, we briefly discussed the Mid-band NOI, so I understand that there is a robust process in place to consider how to increase efficient and effective use of the spectrum in this range, specifically 3.7-24 GHz.**

    a. **To drill down a little further regarding incumbent licensees, is there any information you can share at this time to provide insight into how you anticipate working with these users to ensure a smooth process?**

Response: The *Mid-band Notice of Inquiry* was adopted on August 3, 2017, and comment and reply comments are due on October 2, 2017 and November 1, 2017, respectively. Our open and transparent process will allow interested parties, including incumbent licenses, to provide input on how to share the band to enhance the efficient use of the spectrum between 3.7 GHz and 24 GHz, with specific focus on 3.7-4.2 GHz, 5.925-6.425 GHz, and 6.425-7.125 GHz bands. We will work collaboratively with stakeholders, including federal government partners, to determine appropriate next steps.

The Honorable Bill Johnson

Broadband infrastructure deployment is especially important to my district in rural Eastern and Southeastern Ohio. As a member of both the Communications and Technology and Energy Subcommittees, I understand there are many factors and issues facing its successful deployment. Meaningful engagement means getting all sides of the issues surrounding pole attachments – engagement that incorporates the views of all stakeholders, such as States and localities, and

telecommunications and electricity providers. To better understand these issues, your responses to the below questions will be helpful.

1. **Chairman, this year you formed the Broadband Deployment Advisory Committee. Can you explain where pole attachments are positioned in this discussion on improving our broadband infrastructure?**

Response: I have heard from countless consumers about the importance of increasing broadband deployment and heard from numerous ISPs that access to existing poles, conduit, and rights-of-way is critical to delivering better, faster, cheaper broadband. That's part of the reason why I established the Broadband Deployment Advisory Committee (BDAC)—to provide advice and recommendations to the Commission on how to accelerate deployment of broadband by reducing and removing regulatory barriers to infrastructure investment. Among other issues, the BDAC Working Group on Competitive Access to Broadband Infrastructure is developing recommendations on measures to promote speedier and more efficient competitive access to utility poles, while ensuring safety and the integrity of existing attachments. I look forward to seeing recommendations from the BDAC on that issue.

In addition, in April, the Commission proposed and sought comment on a number of actions designed to accelerate the deployment of next-generation networks and services by removing barriers to infrastructure investment. In particular, that document seeks comment on how to reform the FCC's pole attachment rules to make it easier, faster, and less costly to access the poles, ducts, conduits, and rights-of-way necessary for building out next-generation networks. Streamlining rules, accelerating approvals, and removing other barriers, where possible, will better enable broadband providers to build, maintain, and upgrade their networks, which in turn will lead to more affordable and accessible Internet access and other broadband services for consumers and businesses alike.

2. **Can you highlight the successes and shortcomings of 2011 FCC's order reforming pole attachment rules and rates? What is different about what the FCC is doing now? Can you please highlight what options are being considered, and what alternatives are being offered by parties involved?**

Response: The 2011 pole attachment order took some important steps towards accelerating broadband infrastructure deployment. What we're hearing from many attachers, however, is that the cost and timeliness of the pole attachment process can still be an impediment, sometimes a significant impediment, to deploying broadband.

To that end, the Commission's April *Wireline Infrastructure Notice of Proposed Rulemaking* item sought comment on a number of different options to further reform the pole attachment process to facilitate broadband deployment. First, that item seeks comment on a number of alternatives to speed access to poles, ranging from accelerating the Commission's existing four-stage pole attachment timeline to instituting a completely different pole attachment process.

Second, the item explores steps to ensure that "make ready" charges for poles are reasonable and transparent and that pole attachment rates do not reflect charges that have already been recovered as part of the make-ready process.

Third, the item seeks public input as to whether incumbent local exchange carriers should receive reciprocal access to the poles and related infrastructure of other local exchange carriers.

And fourth, the item seeks comment on the adoption of a 180-day shot clock for resolving pole attachment access complaints, which might lead to more swift resolution of pole access disputes.

3. **You have conducted an impressive tour of the country to ascertain the needs for rural broadband. As someone that is chairing a working group on broadband deployment for Chairman Blackburn, please tell me more about the model you have used on this tour to bring folks to the table. How do you see this model working to reduce regulation, promote partnerships, encourage investment, and avoid disputes regarding pole attachments?**

Response: During my tours, I have tried to meet and hold roundtables with a wide variety of parties. Expanded broadband deployment is an important issue for a wide range of stakeholders, and it is therefore critical that we work together to advance this common goal. For example, I have tried to bring together state and local government representatives, broadband providers, representatives from the business, education, health care, and agricultural sectors, and public safety officials (for whom Next Generation 911, which involves Internet Protocol-based public safety networks, is critical) to discuss this issue. I've also tried to visit as much of the country as I can to explore these issues, from Wardensville, West Virginia to Mission, South Dakota to Flagstaff, Arizona.

4. **This Committee is very familiar with the important role that the stakeholders involved in this debate have on American's everyday life, whether it's the energy to power one's home or the medium to connect us when far away from home. How can we ensure that grid reliability and increased broadband deployment are not mutually exclusive?**

Response: I am firmly committed to ensuring that whatever reforms the Commission undertakes with respect to broadband deployment take into account legitimate concerns about safety and the protection of existing infrastructure, including the reliability of the electrical grid. For instance, as the April *Wireline Infrastructure Notice of Proposed Rulemaking* stated with respect to pole attachments, the Commission is working "toward an approach that facilitates new attachments without creating undue risk of harm." To that end, we will be closely reviewing the submissions from, and consulting with, electrical utilities and other relevant parties that are participating in the proceeding.

Ranking Member Frank Pallone, Jr.

1. **When you were asked at the hearing whether you believe in net neutrality, you said that you believe in a free and open internet. As you know, there has been some dispute about what that might mean. Many net neutrality supporters believe that a free and open internet entails firm net neutrality rules that the FCC can both enforce and police to prevent circumvention. Do you agree with that?**

Response: I believe in a free and open Internet, and the Commission is currently considering the best regulatory framework for securing that value and providing broadband providers with strong incentives to build and expand next-generation networks. Any decision that the FCC makes in

this proceeding will be based on the facts and the law, and we will look to the comments filed in the record to guide our determinations on the relevant issues. Right now, we are reviewing the extensive record that has been compiled in the proceeding, and I have made no final decision on the way forward.

2. You recently responded to my May 18, 2017 letter on the comment periods for the net neutrality proceeding. In your response, you indicate that you are not inclined to extend the timing for the replies in the net neutrality docket because the pre-decisional draft was available to the public three weeks before the vote to adopt the Notice of Proposed Rulemaking. Please respond to the following questions about your response:

a. Will you treat comments filed before the vote the same as those filed after?

Response: As an initial matter, it is important to point out that the Wireline Competition Bureau did, in fact, extend the deadline for reply comments in the *Restoring Internet Freedom* docket by two weeks. The Bureau found that granting "an additional two weeks in which to file their reply comments [would] allow parties to provide the Commission with more thorough comments, ensuring that the Commission has a complete record on which to develop its decisions." I supported that decision.

In terms of your specific question, the Commission will treat all comments filed in compliance with our rules the same.

b. When did you make the public aware that your decision to make the draft available early would substitute for extensions for replies?

Response: I made no such decision. In fact, not only did my pre-meeting publication of the *Notice of Proposed Rulemaking* give the public three more weeks to comment on the specific text of the proposal than they received with respect to the related notice issued during the prior Administration, but also, as indicated above, the deadline for submitting reply comments in the proceeding was extended for two weeks.

c. As you note in your response, the public filed millions of comments in the initial filing round. Do you see comments filed before the vote the same as replies to the initial round of millions of comments?

Response: I see all comments filed in compliance with the Commission's rules before the vote on the Notice of Proposed Rulemaking the same as those filed after the vote.

d. Has any court ever approved your interpretation of the Administrative Procedure Act (APA)?

Response: After the Notice of Proposed Rulemaking was approved by the Commission and released, the public had over three months to submit comments. That is significantly longer than the typical comment period for FCC matters and is well within the range of comment cycles that have been approved by courts under the Administrative Procedure Act.

e. You have decided that the public should have more time reviewing your initial draft than any edits made by your fellow commissioners. Were they consulted about this decision?

Response: I do not believe that the premise of your question is accurate. The initial draft of the NPRM was released three weeks before the vote on the NPRM. By contrast, the comment cycle on the NPRM approved by the Commission lasted for more than three months. I therefore never made the decision referred to in your question.

Subcommittee Ranking Member Michael F. Doyle

1. In April, the Commission deregulated virtually all of the market for Business Data Services. This action was radical break from where the Commission was headed mere months before – and a complete rejection of a framework put forward last year by a large coalition of companies that buy and sell in the marketplace. Despite data showing near-monopoly condition, the Commission deregulated in large part based upon a seemingly nonsensical prediction that competitive entry by "nearby" providers within a few years constituted a competitive market. The FCC has tried its hand at predications in the past – and failed- in this very proceeding.

a. As a proponent of a data-driven approach to regulating, will you commit now to the public release of a timeline to quickly define a specific, ongoing process for assessing market conditions in Business Data Services?

Response: In the *Business Data Services Order* (*BDS Order*), based on the data and other information that was part of the proceeding, the Commission found that there is substantial and growing competition in the provision of BDS in areas served by price cap incumbent local exchange carriers. Upon review of the record, the Commission adopted a new framework for BDS regulation of price cap carriers. In those counties where competitive conditions justifying pricing deregulation exist, the Commission provided for a 36-month transition to pricing deregulation for DS1 and DS3 end user channel terminations. In counties where the data did not indicate that competitive conditions exist, the Commission provided for continuing price cap regulation, with some modifications. Recognizing change will occur over time, the Commission adopted a process for updating the results of the competitive market test every three years using data collected by the Commission.

The Commission also reminded stakeholders that all telecommunications services remain subject to the Commission's regulatory authority under sections 201 and 202 of the Communications Act of 1934, as amended, requiring carriers to provide services at rates, terms, and conditions that are just and reasonable and that do not unreasonably discriminate. If a party believes that another party is not complying with sections 201 or 202, or with the *BDS Order* and adopted rules, it may file a complaint with the Commission pursuant to section 208 of the Act. The annual tariff filing process each summer, which requires the submission of tariff review plans to support proposed revisions to rates, also provides an opportunity for FCC staff to monitor the application of sections 201 and 202 of the Act, as well as the *BDS Order*, as parties modify their tariffs to implement that *Order*.

2. **I'm disturbed by the recent revelations of internet service providers throttling consumers' services and doing so without telling their customers. These actions highlight the need for net neutrality protections.**

    a. **While net neutrality is the law of the land, if you receive a net neutrality compliant—formally or informally—will you commit to following through on it and undergoing a full and complete investigation?**

Response: The Commission will enforce these rules just as it enforces all other rules that are on the books.

3. **Please breakdown the enforcement actions taken by the Commission by individuals, small businesses, and large businesses.**

    a. **How many enforcement actions have been taken and what proportion of these actions have been taken against the entities in each category?**

Response: Since January 23, 2017, the Commission has taken 22 enforcement actions against businesses of many sizes, as well as individuals. For the purposes of this question, the Commission defines "enforcement action" as an action taken by the Commission resulting in a proposed or assessed monetary forfeiture, civil penalty, or settlement payment. Because we lack the relevant information to reliably categorize businesses as either large or small, for the purposes of this question I will distinguish the enterprise as being either "publicly traded" or "privately held." Under this standard, during the relevant period, the Commission has taken one enforcement action against publicly traded businesses (5%), 13 actions against privately held businesses (59%), and eight actions against individuals (36%).

The Honorable Yvette Clarke

1. **It has been several years since the Commission looked at radio ownership rules. Can you tell us your views on the current state of the radio industry and the ownership rules and whether you plan to revisit them, particularly the rules that limit one owner to a maximum number of stations in a particular market as well as a cap on the number of stations in a particular service (i.e., FM or AM)?**

Response: On August 10, 2016, the Commission adopted an order attempting to resolve the 2010 and 2014 quadrennial broadcast ownership review proceedings. As part of this recent proceeding, the Commission reviewed the local radio ownership rule and concluded that the existing rule—including the market limits and the AM/FM subcaps—continued to serve the public interest. While several parties subsequently filed petitions for reconsideration of various aspects of this order, including an element of the radio ownership rules involving the treatment of so-called "embedded markets," no party sought reconsideration of the overall radio ownership rules. Consistent with its statutory obligation under section 202(h) of the Telecommunications Act of 1996, as amended, the Commission will once again review its broadcast ownership rules, including the local radio ownership rule, as part of its next quadrennial review proceeding. Any decision that the Commission makes in that proceeding will be based on the facts gathered in the record.

2. **Is diversity of ownership a priority with the FCC? What efforts have you taken, or will take, in addition to the new Advisory Committee, to foster competition and diversity in ownership for broadcasting, cable, satellite, wireless, wireline, Internet – all media and telecommunications services regulated by the FCC? When will the FCC undertake the requisite Adarand Studies that will document the past and current discriminatory practices and/or regulatory actions that have prevented robust diverse ownership?**

Response: As I mentioned in my May 8, 2017, letter to you, I share your goal of facilitating competition in the video marketplace and a diverse media. Indeed, diversity in the communications industry is of such importance that I created the Advisory Committee on Diversity and Digital Empowerment (ACDDE), which met for the first time on Monday, September 25, 2017. I have identified three working groups that will assist the ACDDE in carrying out its mission: (1) Broadcast Diversity and Development; (2) Digital Empowerment and Inclusion, and (3) Diversity in the Tech Sector. I envision that these working groups and the ACDDE, as a whole, will be instrumental in ensuring that all Americans have the opportunity to participate in the communications marketplace, no matter their race, gender, religion, ethnicity, or sexual orientation. I hope this advisory committee will help the Commission take important strides towards increasing diversity throughout the communications industry and bringing digital opportunity to all Americans.

The important work of the advisory committee is just getting underway, and I look forward to reviewing their recommendations, including any proposals for further FCC action to facilitate ownership diversity. In particular, I have asked the ACDDE to develop recommendations for how to structure an incubator program that would increase broadcast diversity. In the meantime, however, I would be open to further discussions and working with you to figure out what we can do within the existing legal framework to find ways to move forward on this very important issue.

The Honorable Bobby L. Rush

1. **I have a constituent that's a facilities-based broadband provider that wants to provide high-speed broadband as a Lifeline provider to underserve people on the South Side of Chicago. It was granted a Lifeline Broadband Provider designation by the FCC in January, but in February you directed your Bureau to revoke all of those approvals, on the ground that under the Communications Act only state PUCs can grant such authority. You also said in formal statements and in many letters to Members of Congress that you support Lifeline broadband grants through the state process, and that "New companies can enter the program using this process, and I encourage them to continue to do so." BUT that isn't so: my constituent has been told by the Illinois Commerce Commission and that they can't grant designation because an FCC rule (rule 54.201(j)) preempts states from doing it. So the FCC tells them they have to go to the state, and the state responds that an FCC rule prevents states from acting. I've read the rule-- it does say that: "A state commission shall not designate a common carrier as a Lifeline Broadband provider eligible telecommunications carrier." Meanwhile, underserve people in the South Side are being deprived of broadband service under Lifeline, because the incumbent companies are getting out of Lifeline.**

a. What can you do to fix this situation quickly? I worry that a rulemaking will take a very long time, and you haven't even started one yet.

Response: The Commission is committed to promoting digital opportunity and access to modern communications services for the nation's low-income families. However, the Commission must always act within the legal authority given to it by Congress. State commissions continue to retain the primary authority to designate Lifeline-only eligible telecommunications carriers (ETCs), and ETCs that receive both high-cost and Lifeline funding, which are all eligible to receive Lifeline support for broadband.

Congress gave state governments, not the FCC, the primary responsibility for designating ETCs to participate in universal service under Section 214 of the Communications Act. Any ETC can receive universal service support for all Lifeline-supported services, including broadband. Section 54.201(j) of the Commission's rules only purports to limit state action with regard to Lifeline Broadband Providers (LBPs), and not to other ETC designations. States continue to play an important role in traditional non-LBP ETC designations, where state law grants them authority to do so. The statute and the Commission's rules do not prevent a state from exercising its jurisdiction to designate ETCs, which allows the designated carrier to provide and seek Lifeline reimbursement for voice and broadband services. Indeed, since February 2017, eleven companies in fourteen different states have received ETC designations to participate in the Lifeline program, including one company that was previously granted designation as an LBP.[1]

[1] *See Application of Boomerang Wireless, LLC d/b/a enTouch Wireless, Hiawatha, Iowa, Seeking Designation as an Eligible Telecommunications Carrier in the State of Nebraska for the Limited Purpose of Offering Wireless Lifeline Service to Qualified Households*, Nebraska Public Service Commission Application No. C-4852/NUSF-105 (Feb. 7, 2017); *Petition of Boomerang Wireless, LLC EnTouch Wireless*, Hawai'i Public Utilities Commission, Decision And Order No. 34431 (Mar. 3, 2017); *Illinois Electric Cooperative*, Illinois Commerce Commission, Order, 16-0191 (Mar. 22, 2017); *Midcontinent Communications Designated Eligible Carrier Application*, North Dakota Public Service Commission, Case No. PU-17-50 (Mar. 29, 2017); *Application of Midcontinent Commc'ns, A S. Dakota Gen. P'ship, for a Certificate of Convenience & Auth. to Provide Telecommunications Servs. Within the State of Kansas, & for Designation as an Eligible Telecommunications Carrier*, Kansas State Corporation Commission, Docket No. 17-MCCT-254-ETC (Apr. 13, 2017); *Application of Bommerang Wireless dba EnTouch Wireless for Designation as an Eligible Telecommunications Carrier*, South Dakota Public Utilities Commission, TC13-035 (Apr. 28, 2017); *Petition of Vitelcom Cellular Inc., for Designation as an Eligible Telecommunications Carrier – Lifeline Only*, Government of the Virgin Islands of the United States of America, Public Service Commission, Docket No. 661, Order No. 55/2017 (May 2, 2017); *Petition of the City of Burlington, Vermont, d/b/a Burlington Telecom, for Designation As an Eligible Telecommunications Carrier in the State of Vermont for the Purpose of Offering Lifeline Serv. to Eligible Low-Income Households*, Vermont Public Service Board, Case No. 8883 (May 22, 2017); *Application of BlueBird Communications, LLC, for Designation as an Eligible Telecommunications Carrier*, Wisconsin Public Service Commission, 626-TI-100 (June 5, 2017); *Petition of Peoples Telecom, LLC for Designation as an Eligible Telecommunications Carrier in the Commonwealth of Kentucky*, Kentucky Public Service Commission, Case No. 2017-00061 (June 9, 2017); *Application of Flat Wireless, LLC d/b/a Cleartalk Wireless for Designation as an Eligible Telecommunications Carrier (ETC) & Eligible Telecommunications Provider (ETP)*, Texas Public Utility Commission, Docket No. 46667 (June 12, 2017); *The Application of Assist Wireless, Inc., for Designation as an Eligible Telecommunications Carrier Pursuant to Section 214(e)(2) of the Communications Act of 1934, as Amended*, Michigan Public Service Commission, Case No. U-18348 (July 31, 2017); *Application of Glob. Connection Inc. of Am. d/b/a Stand Up Wireless to be Designated as an Eligible Telecommunications Carrier in the State of Nevada Pursuant to NAC 704.680461 & Section 254 of the Telecommunications Act of 1996*, Nevada Public Utilities Commission, Docket No. 17-05018 (Aug. 18, 2017); *Application of Cross Cable Television, LLC for Designation as an Eligible Telecommunications Carrier Pursuant to the Telecommunications Act of 1996*, Oklahoma Corporation Commission, Order No. 667619 (Aug. 30, 2017);

These designations enable the carriers to provide Lifeline-supported voice and broadband services within the designated service areas granted by the state.

2. **Given your prior work with Securus, what, if any, consultations did you have with the FCC General Counsel on avoiding the appearance of impropriety and/or whether or not any conflict of interest existed or exists prior to your decision not to defend the FCC rulemaking in court? What was the outcome of those conversations?**

Response: The Office of General Counsel has assured me that I appropriately consulted with agency ethics officials before my participation in any matter involving Securus and that my participation has fully complied with all ethics rules.

The Honorable Anna G. Eshoo

1. **Recent merger proceedings at the FCC built a record that has direct bearing on the current net neutrality rulemaking. A motion was recently filed in the net neutrality proceeding requesting modification of the protective orders in these merger proceedings to ensure that commenters have access to a narrow range of relevant, confidential information collected by the FCC during the merger review process. The FCC has previously allowed confidential information from other proceedings to be used in subsequent rulemakings when it is relevant.**

    a. **Will you commit to ensuring that all interested commenters have access to this information in order to ensure a full and complete record in the net neutrality proceeding?**

Response: I will commit to continuing to evaluate the motion filed by INCOMPAS and the Oppositions filed in response to it as the Commission determines how best to proceed.

2. **A recent study commissioned by the Wi-Fi Alliance found that the United States will need as much as 1.6 Ghz of new spectrum for unlicensed use by 2025. This same study also showed the importance of making sufficiently large bands of unlicensed spectrum available to support next generation wireless standards.**

    a. **What does the FCC plan to do to ensure that we meet our unlicensed spectrum needs in the coming years?**

Response: The Commission recognizes the important role of unlicensed spectrum in the communications ecosystem as well as the need to accommodate greater access to spectrum for both licensed and unlicensed services and devices. That is why we recently initiated a *Notice of Inquiry* that, drawing in part on input we have received from the unlicensed community, asks whether parts of the "mid-band" spectrum between 3 and 24 GHz might be made available for broadband services, with a particular focus on potential new unlicensed access in the upper 6 GHz band. This item shows the importance of working with stakeholders to identify new spectrum targets for unlicensed use. We are also analyzing Phase 1 results from our testing program for potential sharing in the 5.9 GHz band for unlicensed operations.

Application of Q Link Wireless LLC for Designation as an Eligible Telecommunications Carrier in the State of Arkansas, Arkansas Public Service Commission, Order (Sept. 6, 2017).

3. **Do you intend to move forward with the Notice of Proposed Rulemaking on independent programmers that was issued last year? If not, what steps will the FCC take under your leadership to bring attention to the challenges faced by independent programmers?**

Response: The record in this proceeding closed on February 22, 2017. The Commission is reviewing the record and considering next steps. On September 8, 2017, I announced the appointment of 31 members to the Advisory Committee on Diversity and Digital Empowerment (ACDDE), which includes a representative from the independent programming industry. The Committee met for the first time on Monday, September 25, 2017. The ACDDE's work will enhance the Commission's ability to promote policies favoring diversity of media voices. I hope this advisory committee will help our agency take important strides towards increasing diversity throughout the communications industry, especially for independent and minority programmers.

4. **The E-Rate program has had a real impact in connecting schools in California and around the country to broadband. Will you commit to maintaining the current funding levels for this important and successful program?**

Response: I am deeply committed to doing everything within the FCC's power to close the digital divide. I believe an effective E-rate program—one that promotes better connectivity for students and library patrons alike—can be a powerful tool to help bridge that divide. This is why, four years ago, I said that "E-rate is a program worth fighting for."

Unfortunately, there have been serious flaws in the administration of the E-rate program, specifically related to the process by which schools and libraries apply for E-rate funding, that are preventing many schools and libraries from getting that funding. I have asked the Universal Service Administrative Company (USAC) to provide a detailed report on plans to fix the existing problems so it can administer the E-rate program in a manner that is fully compliant with our rules and that works for applicants and participants. Currently, my focus is on reducing unnecessary red tape and making it easier for schools and libraries to apply for the program and receive funding.

The Honorable Doris Matsui

1. **The FCC's 2016 Lifeline Modernization Order required access interfaces for the National Verifier that service the needs of different users in a cost effective and efficient manner. I understand that USAC recently announced that it will not make available an application programming interface (API) connection for the National Verifier.**

    a. **Did the FCC examine what impact the lack of an API would have on eligible subscribers seeking to sign up Lifeline service? If so, please outline what barriers the lack of API might create. If not, please explain why the FCC did not conduct such an analysis.**

Response: The FCC and USAC have spent considerable time and resources developing a system that interacts with multiple federal and state resources to create a Lifeline Eligibility Database (LED). This database, along with the existing National Lifeline Accountability Database (NLAD), form the National Verifier. In designing the user interfaces for subscribers and

carriers, the FCC and USAC considered compliance with the Lifeline rules and ease of use for end-users, especially consumers attempting to enroll in the program.[2] The FCC and USAC ultimately chose to employ a system that preserved direct control over the consumer form's language and certifications. This system will remove from carriers the burden of ensuring that consumer enrollment forms comply with the Commission's rules in National Verifier states and will reduce consumer confusion during the enrollment process. Additionally, this system will help detect and restrict abusive practices like requesting eligibility checks without consumer consent by requiring carriers and their agents to create individual entries for each enrollment.

b. What is the estimated cost of real time manual checks of customer eligibility against the Lifeline Eligibility Database versus the cost of allowing service providers to use an API integrated with the National Verifier? If the FCC has not estimated these costs, please explain why such an analysis has not been conducted.

Response: The 2016 Lifeline Order established that the National Verifier would be responsible for determining subscriber eligibility for the Lifeline program. The National Verifier will determine subscriber eligibility through connections to state and federal databases. If a subscriber's eligibility can be verified using those databases, the National Verifier will provide a real-time "yes" response. If not, the subscriber will need to provide documentation demonstrating eligibility, which will be reviewed by the Lifeline Support Center. The subscriber will be able to upload the documentation to the National Verifier and eligibility determinations will be made within minutes. The FCC and USAC estimate that the eligibility verification cost of the National Verifier will be $2 per subscriber.[3] This is an estimated $3 in per-subscriber savings versus what carriers are currently estimated to spend verifying eligibility.[4]

c. What are the estimated time delays for consumers as a result of manual eligibility checks? Without an API, is real time verification of eligible consumers possible? If the FCC has not estimated these delays, please explain why such an analysis has not been conducted.

Response: The National Verifier is designed to provide automated near-real-time eligibility checks whenever possible. The National Verifier web portal is designed to collect eligibility information, documentation, and certifications in a manner that allows the system to determine the most efficient means to verify the subscriber's eligibility. Subscribers will be checked against all available federal and state data sources. If a subscriber's eligibility requires manual document review because they cannot be found in an automated data source, the Lifeline Support Center will review the eligibility documentation. Determinations based on manual review will be made within minutes during operational hours.

2. I understand that as part of the process of migrating customers to the National Verifier, subscribers enrolled prior to July 2017 may have to provide new and potentially duplicative documentation to re-demonstrate eligibility for the program.

[2] Details about design development and system capabilities are included in the National Verifier plan submitted to the FCC by USAC. *See* USAC, National Verifier Plan (July 2017), https://usac.org/res/documents/li/pdf/nv/Draft-National-Verifier-Plan.pdf (*National Verifier Plan*).

[3] *National Verifier Plan* at 87.

[4] *Id.*

a. **Did the FCC consider potential barriers this may create for eligible Lifeline subscribers?**

Response: The FCC has endeavored to create a robust and efficient National Verifier to strengthen the integrity of the Lifeline program by minimizing fraud, waste, and abuse. In creating the National Verifier, the FCC and USAC seek to leverage and improve existing enrollment and certification practices while not allowing weaknesses in existing enrollment processes to damage the integrity of the National Verifier. Upon launch of the National Verifier in each state, the FCC and USAC must ensure that the Lifeline program provides support only for eligible subscribers in National Verifier states. The National Verifier will accomplish this by confirming the eligibility of all possible subscribers through automated connections to federal and state data sources, but we anticipate that a small percentage of subscribers will need to use documentation to demonstrate their eligibility. The FCC and USAC chose the July 2017 timeframe for allowing legacy documentation to be used to determine current Lifeline eligibility by balancing the risks of allowing outdated subscriber documentation against the burden on subscribers. This will ensure that subscribers in the National Verifier database have had their eligibility confirmed within a year, thus fulfilling the recertification requirement for many subscribers.

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C.20554

Office of the Director

November 3, 2017

The Honorable Ron Johnson
Chairman
Committee on Homeland Security and Governmental Affairs
United States Senate
340 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Johnson:

Enclosed please find responses to Questions for the Record submitted for Chairman Ajit Pai regarding his appearance before the Homeland Security and Governmental Affairs Committee on September 14, 2017, at the hearing titled "FCC's Lifeline Program: A Case Study in Government Waste and Mismanagement."

If you have further questions, please contact me at (202) 418-2242.

Sincerely,

Timothy B. Strachan
Director

Post-Hearing Questions for the Record
Submitted to the Honorable Ajit Pai
From Senator Heidi Heitkamp

FCC's Lifeline Program: A Case Study of Government Waste and Mismanagement

September 14, 2017

1. **It's my understanding that when universal service funds were maintained in a commercial bank, those accounts generated maybe tens of millions of dollars per year in interest. I presume those interest earnings were used to help administer the USF or for the purposes of the fund. Is the loss of that interest going to hurt the USF programs?**

Response: No. Transferring universal service monies to the Treasury will strengthen the program by reducing the risk of loss or misappropriation of more than $8 billion in federal funds should they be held outside of Treasury. What is more, the USF program budgets and disbursements are established and determined pursuant to the Commission's orders and rules, and the move of universal service monies to Treasury does not change those processes.

2. **Given the low subscribership on Tribal Lands, do you have plans to target outreach and education of Lifeline to the residents of Tribal lands in 2018 as part of your effort to bridge the digital divide?**

Response: I too am concerned about connecting residents of Tribal lands to digital opportunity. That's one reason why, earlier this year, I asked the Universal Service Administrative Company (USAC) to work to ensure residents on Tribal lands had sufficient ability to certify their qualifications to participate in the Lifeline program—and I'm pleased to say we were able to do so without risking taxpayer funds. Moreover, just last week I circulated a proposal to my colleagues to ensure that providers that receive enhanced Lifeline support for serving Tribal lands reinvest that support in broadband-capable networks on Tribal lands.

That's why I'm also glad to report that we already have in place tools to help connect Tribal residents. For example, USAC maintains an up-to-date toolkit and other Lifeline related materials for outreach to residents on Tribal lands.[1] Additionally, the Commission's Office of Native Affairs and Policy conducts regular Tribal Consultations in Washington, DC and on Tribal lands across the country.[2] These outreach efforts are intended both to educate the Tribes about Commission programs and to engage in conversations to better assist the Tribes.

[1] USAC, Community Outreach (last visited Oct. 30, 2017), http://www.usac.org/ls/community-outreach.aspx.

[2] FCC, Native Nations (Oct. 6, 2017), https://www.fcc.gov/general/native-nations.

Post-Hearing Questions for the Record
From Senator James Lankford

1. **I recognize the importance of the Lifeline program to serve those most in need for connectivity. We have previously discussed the unique issues facing the Lifeline program where companies target Oklahoma due to higher reimbursement rates associated with the tribal lands eligible for enhanced support. Oklahoma has the largest subscription rate for tribal recipients, representing 148,251 of the 269, 985 nationwide total. However, due to verification reforms and redefining of Oklahoma's Enhanced Lifeline Support maps, Oklahoma has seen subscription rates decline from its 2014 total of 313,773. To keep with the intent of the program and ensure that Lifeline funds are being spent in the most effective manner it is my suggestion the FCC examine refining the subscriber requirements for enhanced support. As the FCC continues implementing reforms with USAC and the Lifeline program, have you considered updating the verification requirements or processes for subscribers to the enhanced tribal support?**

Response: Yes. Just last week I proposed to my colleagues several improvements to the rules governing enhanced Lifeline support for Tribal lands. These changes would target enhanced Lifeline support to residents of rural areas on Tribal lands, establish mapping resources to identify rural Tribal lands for enhanced Lifeline support, require independent certification of residency on rural Tribal lands, and direct enhanced support to facilities-based providers.

If adopted, the amended rules would improve broadband deployment and curtail waste in the program by focusing enhanced Lifeline support on providers that are directly investing in networks on Tribal lands. The amended rules would also only allow a subscriber to receive enhanced Lifeline support if their residential address is on rural areas within federally-recognized Tribal Lands, according to mapping resources identified by the Commission. This would replace the existing system, in which subscribers self-certify that they reside on Tribal lands—a process unacceptably vulnerable to fraud and abuse.

2. **Have you considered studying the feasibility of requiring subscribers to the enhanced tribal support to show verification of tribal citizenship or enrollment?**

Response: I believe that enhanced Lifeline support is most effective when it is used to encourage deployment of broadband-capable networks in digitally redlined areas. In keeping with that goal, I believe eligibility for enhanced Lifeline for Tribal lands should turn not on Tribal citizenship or enrollment, but on whether a low-income consumer resides in rural Tribal lands—lands that historically have received less service and have offered consumers fewer competitive options. As we move forward with our reforms, I look forward to considering this suggestion as one alternative means of achieving what I believe is our common end: a Lifeline program that no longer tolerates waste, fraud, and abuse.

Post-Hearing Questions for the Record
From Senator Claire McCaskill

Eligibility Verification

The FCC's 2012 Lifeline Reform Order called for the creation of the National Lifeline Accountability Database (NLAD) to prevent duplicate subscribers. The NLAD is designed to reject any applicant who appears to be a duplicate of an existing subscriber or who shares an address with an existing subscriber.

Although Lifeline providers are required to query this database before enrolling new subscribers, one loophole – the manual override process – has significantly undermined the success of the NLAD.

1. Please describe the safeguards currently in place to prevent the improper use of manual override process.

Response: You are right to be concerned about the manual override process. The NLAD allows providers to use certain manual dispute resolution processes to enroll a subscriber even when the enrollment was initially rejected. Specifically, if the NLAD cannot verify an applicant's identity through the LexisNexis Identify Verification and Authentication system, current federal regulations allow a carrier to manually override the system. Current rules state that the carrier must review and retain documentation that demonstrates the subscriber's identity and notify the Universal Service Administrative Company (USAC) of the type of documentation it reviewed. But under current rules, USAC does not review that documentation before the override is effective.

I believe that we must ensure the enrollment processes designed to prevent eligible low-income consumers from being denied benefits are not being used fraudulently by unscrupulous providers. That's why last week, I proposed to my colleagues a Notice of Proposed Rulemaking that, among other issues, would seek comment on requiring USAC to directly review subscribers' documentation before a manual override can occur—adding a much-needed control to the current process.

An investigation you led as an FCC Commissioner found that between October 2014 and April 2016, Lifeline carriers enrolled 4.3 million subscribers using the manual override process. During the hearing, you stated that you would need to "change the rules" in order to prevent these providers from continuing to override the database.

1. **Please identify any statute, regulation, or administrative policy, which currently restricts your ability to prevent providers from continuing to override NLAD determinations even if they are suspected of abusing the override process.**

Response: Unlike other universal service programs, the Lifeline program does not yet have rules that allow the Commission or USAC to prohibit particular agents from abusing our processes. In

addition to the proposal, described above, that would limit the value of the manual override process for unscrupulous agents, I proposed last week to my colleagues new rules that would require Lifeline agents to register with USAC before accessing the NLAD or National Verifier, would allow the Commission to take direct enforcement actions against agents that violate program rules (including prohibiting further participation in the program as a Lifeline agent), and would exclude commission-based sales agents entirely from the verification process.

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C.20554

Office of the Director

December 12, 2017

The Honorable Marsha Blackburn
Chairwoman
Subcommittee on Communications and Technology
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairwoman Blackburn:

Enclosed please find responses to Questions for the Record submitted for Chairman Ajit Pai regarding his appearance before the Subcommittee on Communications and Technology on October 25, 2017, at the hearing entitled "Oversight of the Federal Communications Commission."

If you have further questions, please contact me at (202) 418-2242.

Sincerely,

Timothy B. Strachan
Director

Additional Questions for the Record

Subcommittee Chairman Marsha Blackburn

1. **In your testimony, you cited the importance of provisions in the Subcommittee's recently passed FCC reauthorization bill that would authorize the Commission place deposits from bidders in spectrum auctions to be sent to the Treasury. Specifically, you testified this measure is "critical" because without it "the Commission currently has no way to comply with the law—and no way to move forward with any large spectrum auction.**

   Can you elaborate for the record on the legal and administrative impossibility of moving forward with auctions without a change in the law to allow the Commission to deposit bidder payments directly with the U.S. Treasury?

   Response: Absent a legislative change, the Commission will not be able to move forward with any large spectrum auctions in the future. That would include potential auctions of the 3.5 GHz band (mid-band spectrum) or the 24, 28, 37, 39, and 47 GHz bands (high-band spectrum) in 2018 and 2019.

   The current statute, at 47 U.S.C. § 309j(8)(C), states as follows: "Any deposits the Commission may require for the qualification of any person to bid in a system of competitive bidding pursuant to this subsection shall be deposited in an interest-bearing account at a financial institution designated for purposes of this subsection by the Commission (after consultation with the Secretary of Treasury)."

   This requirement made it difficult for us to find a private-sector bank willing to hold the upfront payments for our last large spectrum auction (the broadcast incentive auction). In fact, after conducting market research through a request for information to potential depository institutions, the FCC determined that *no* private financial institution appeared willing to receive the upfront payments and provide adequate collateralization for the incentive auction. Placing the upfront deposits in a private financial institution without adequate collateralization would subject the United States government to an imprudent risk of loss, so the FCC sought an alternative solution for that auction.

   Although the Treasury Department designated the Federal Reserve Bank of New York (FRBNY), as fiscal agent of the United States, to hold upfront payments for the Incentive Auction, the FRBNY did so in a non-interest-bearing account. Given the terms of the statute, all parties agreed this solution was a once-only, stop-gap measure for the incentive auction. The FCC and the FRBNY do not have an ongoing agreement for future auctions, and the FRBNY has previously indicated to the FCC that it would not be interested in providing these services on an ongoing basis.

   For these reasons, the FCC's Office of Managing Director (OMD) does not expect to identify a private financial institution willing to set up an interest-bearing account in compliance with the statute for a large spectrum auction. This would severely impact both expected public revenues from such an auction and American leadership in wireless innovation.

2. **The Subcommittee notes recent changes in the proceeding regarding the Citizens Broadband Radio Service (GN Docket No. 12-354). It appears these changes may increase the value of the spectrum to potential bidders.**

   Without legislation authorizing the Commission to place auction bidder deposits directly with the Treasury, can you estimate how much the federal government loses for deficit reduction?

   Response: On October 24, 2017, the FCC proposed revisions to its rules in the 3.5 GHz band to promote investment, keep up with technological advancements, and maintain U.S. leadership in the deployment of next-generation services. The 3.5 GHz band is expected to be a core component of worldwide 5G network deployments, and these proposed rule changes could facilitate the implementation of 5G networks and accelerate deployment of a promising new generation of wireless technologies.

   We expect the auction of the 3.5 GHz band would be a large spectrum auction—meaning we could not proceed with the auction without legislative action with respect to bidder deposits—based on recent wireless spectrum auctions. We note that the 3.5 GHz spectrum auction could include up to 70 MHz of mid-band spectrum. Our most recent large auctions were the broadcast incentive auction (auctioning 70 MHz of low-band spectrum with net bids of more than $19 billion), the AWS-3 auction (auctioning 65 MHz of mid-band spectrum with net bids of more than $40 billion), and the H-Block auction (auctioning 10 MHz of mid-band spectrum with net bids of more than $1.5 billion).

The Honorable Brett Guthrie

1. **I understand that NHTSA has an open rulemaking on the matter of V2V communications and is coordinating with the Commission on whether or how to share the spectrum currently allocated to Intelligent Transportation Systems (ITS) in the 5.9 GHz band. Are you willing to commit to working with NHTSA and other stakeholders on this issue to ensure the band remains available for ITS use in the future, and free from in-band or out-of-band emissions from other potential users?**

   Response: The FCC already is working with NTIA, which represents the Federal Government (including NHTSA) on spectrum matters, and the Department of Transportation, while evaluating the potential use of 5.9 GHz spectrum for unlicensed devices. We have not proposed to make any changes in the current allocations for ITS at 5.9 GHz at this time and will continue to monitor developments in this area. As with all spectrum, our goal is for spectrum to be put to its most efficient use.

2. **There are critical infrastructure industries like electric utilities whose wireless needs are absolutely paramount when it comes to reliability and freedom from interference, as drastic consequences can follow when their networks are disrupted by outside users. Are you willing to work with utilities on how best to harden their networks, and is there anything you can share on work you've already been doing to meet their wireless reliability needs?**

   Response: I agree that the wireless reliability and resiliency needs of the electric grid are a critical priority. We have taken steps to work with utilities to address best practices for their wireless operations. In particular, the Commission's Communications Security, Reliability and Interoperability Council (CSRIC), the federal advisory committee that provides recommendations

to industry and government to ensure reliability and security of communications systems, has developed best practices for wireless network operations. These best practices apply to service providers, government agencies, equipment suppliers, and network operators—including utilities that operate their own networks.

Commission staff also coordinate with representatives from the Electricity Information Sharing and Analysis Center (E-ISAC) to determine the interdependencies between the communications industry and the transmission/transportation of electrical power. We will continue to work with our partners in the critical infrastructure industries, coordinate with E-ISAC and provide support to utilities on hardening networks and improving reliability.

Subcommittee Ranking Member Michael F. Doyle

1. **Mr. Chairman, you have highlighted the need for evidence-based, data-driven policymaking. The FCC needs quality data to allow objective assessment of both expected effects and actual effects. Can you clarify how this will be applied to the April 2017 decision to eliminate longstanding protections in the $45 billion Business Data Services market?**

   Response: In the *BDS Order*, the Commission determined that, thanks to increased competition, most—but not all—areas are now sufficiently competitive that tariffs and price caps are no longer optimal. Based on a massive and unprecedented data collection on industry service and prices, the agency developed a "competitive market test" to identify which areas would receive regulatory relief. Under that two-prong test, a county is deemed sufficiently competitive if (1) 50% of the locations with BDS demand in that county are within a half mile of a location served by a competitive provider, or (2) 75% of the census blocks in that county have a cable provider offering broadband services. In both cases, the Commission concluded that the record evidence supported lower percentage thresholds but opted to take a "conservative approach," out of an abundance of caution, to ensure that the counties where *ex ante* regulation will now not apply are predominantly competitive. Indeed, the record showed many providers are willing to build out at least by a half-mile, with some going further. And there's strong competition well within the half-mile threshold; about half of buildings with demand are within 88 feet of competitive fiber facilities, and 75% are within 456 feet.

   In addition, the *BDS Order* reminded stakeholders that all telecommunications services remain subject to the backstop of the Commission's fast-track complaint process, which will ensure just and reasonable rates and terms.

   Going forward, the *BDS Order* directed the Wireline Competition Bureau to review data on competition every three years to determine whether there are additional regulated counties that meet the 75% threshold specified by the Commission's competitive market test. This determination is subject to challenge from interested parties that can submit additional data in response.

2. **On the one hand, you have sought feedback on how to streamline the Form 477 process, which means less data will be available. On the other hand, you have said you plan to evaluate competition, pricing, and last-mile deployments in the BDS market at least every 3 years.**

a. What data do you expect to utilize for the review process?

Response: The *BDS Order* provides that the Wireline Competition Bureau will use Form 477 data to determine whether any additional regulated counties meet the 75% threshold specified in the competitive market test. Parties challenging those results may submit other data to the Commission for review.

Notably, the Commission is undergoing a review of the Form 477 data collection process to "examine our experience based on our current data collection in order to collect better and more accurate information on Form 477; and, to explore how we can revise other aspects of the data collection to increase its usefulness to the Commission, Congress, the industry, and the public." Among other things, the Commission has sought comment on requiring fixed broadband providers (like those subject to the 75%-threshold test) to report more granular data.

b. When will you disclose to Congress and the public how the review will be structured and what metrics will be used as determinants of success?

Response: The *BDS Order* specifies that the Wireline Competition Bureau will review the Form 477 data on a regular three-year basis and determine whether any additional regulated counties meet the 75% threshold specified in the competitive market test. The *BDS Order* also specified the structure of the test—if there is cable broadband availability in 75% of the census blocks served by an incumbent LEC in a particular county, that county is deemed competitive. Once that analysis is complete, the Wireline Competition Bureau will release a Public Notice that lists newly competitive counties and will also provide this information on the Commission website. At that time, parties desiring to challenge these results may file petitions for reconsideration or seek full Commission review through an Application for Review.

The Honorable Yvette Clarke

1. **Chairman Pai, at the Subcommittee's October 25th FCC Oversight hearing, you seemed to testify that rolling back the FCC's Local TV Ownership Rules would increase the number of diversely-owned TV stations. I would like to clarify your answers.**

   a. Will your deregulatory media ownership order (FCC-CIRC1711-06)—as opposed to any new smaller projects you are proposing— increase the number of women owned and controlled TV Stations and the number of African-American owned and controlled TV stations? Please answer yes or no, and then provide a brief explanation.

   Response: I believe that actions taken in the recent Media Ownership Order on Reconsideration will help promote competition in the broadcast television industry and facilitate new entry. The Local Television Ownership Rule adopted in the Order better reflects the competitive conditions in local markets and will allow television broadcasters to improve service to their local communities.

   To be sure, structural ownership rules—such as the competition-based Local Television Ownership Rule—cannot directly address the most significant barriers to station ownership, i.e., lack of access to capital and the need for technical/operational experience. But as I

testified at the hearing you mention, the Order took two important steps that *will* help address these issues.

First, it eliminated the attribution rule for television Joint Sales Agreements (JSAs). By eliminating this restriction, the Order increases access to a potential source of financing and technical assistance for new entrants. Television JSAs can help promote diverse ownership and improve program offerings, including local news and public interest programming, in local markets. (I have previously used the example of WLOO-TV, owned by Tougaloo College and managed by Pervis Parker, as an example of how JSAs can enable African-American ownership, leadership, and content-generation in broadcasting.)

Second, the Commission decided in the Order that it will adopt an incubator program to help create new sources of financial, technical, operational, and managerial support for eligible broadcasters. This program can create ownership opportunities for new entrants and small businesses, thus promoting competition and new voices in the broadcast industry. The Notice of Proposed Rulemaking accompanying the Order initiates a new proceeding to seek comment on how best to implement the Commission's incubator program.

Additionally, our consideration of this issue will be assisted by the newly established Advisory Committee on Diversity and Digital Empowerment. As you may know, this Committee lay dormant for the past few years. I rekindled it, specifically directing the creation of a working group on promoting diversity in the broadcast business. It is my hope that this committee and working group will recommend ways in which the Commission can help increase diversity throughout the communications industry.

b. If your deregulations do not result in those increases within six months of when they go into effect, will you commit to reversing these deregulatory policies at that time? Please answer yes or no.

Response: Next year, we will have the opportunity to review our rules once again. Consistent with our statutory mandate, in 2018 we will begin the next Quadrennial Review of our media ownership rules and will seek public comment on these regulations at that time. The decisions that we make during that review will be based on the facts in the record, including any impact of the policies we adopted this year. Moreover, I will continue to seek out ways to promote ownership diversity during my Chairmanship. In particular, I look forward to the recommendations of the Diversity Committee on how best to structure the Commission's incubator program to help promote ownership diversity in the broadcast industry.

The Honorable Debbie Dingell

1. **Chairman Pai, you noted in response to my questions at a recent FCC Oversight Hearing before the House Committee on Communications and Technology that the Federal Trade Commission (FTC) will have a role in overseeing the privacy of ATSC 3.0 users.**

    a. Has FCC staff coordinated with FTC staff to discuss these issues to ensure the FCC does not approve a technical standard that fails to adequately protect consumers' privacy or security?

Response: The Commission's approval of the technical standards for ATSC 3.0 did not raise novel privacy issues requiring coordination with the FTC. If Next Gen TV broadcasters fail to ensure that consumers' personal information is protected, the FTC has broad authority to enforce consumers' privacy rights. In particular, Section 5 of the FTC Act, which prohibits unfair and deceptive practices in the marketplace, gives the FTC the authority to take enforcement action against companies that fail to adhere to their stated privacy and security policies. The FCC intends to closely monitor the transition to Next Gen TV.

2. **It is my understanding that there are several different business models for targeted advertisements under ATSC 3.0. One model includes building transmitters similar to cell towers around the DMA to do regional advertising. I understand this is a very capital intensive process with a high operating expense, but that it would not require the collection of personal information from consumers.**

    a. Is that correct? If no personal information from consumers is required, what standards will be applied to determine whether my constituents would choose to see targeted advertisements or not?

    Response: Based on the specifications in the ATSC 3.0 technical standard, there are multiple ways in which an ATSC 3.0 broadcaster could provide geographically targeted advertising without collecting consumers' personal information. To provide geographically targeted ads, the broadcaster transmits multiple simultaneous advertisements, and the consumer's receiver makes the decision as to which ad to display. One way this can be accomplished is through the use of Single Frequency Networks (SFNs), a technique that broadcasters use to transmit signals on the same frequency from multiple antennas in a local geographic area in order to improve coverage of the broadcast station. In addition to providing improved coverage, the use of SFNs may enable a receiver to figure out where it is located by knowing from which SFN transmitter it is getting its signal and decide which advertisement to display based on this information. Geographically targeted advertising could also be enabled by the local collection by the receiver of a zip code or some other location information provided by the consumer during the set-up of the receiver. The receiver would never have to transmit that information back to the broadcaster or anyone else. Such geographically targeted advertising could allow a small regional business to advertise to only those viewers residing in its local geographic area, rather than to the entire television market.

    You are correct that such geographically targeted advertising would not require the collection of personal information from consumers. There also is no need to enable consumers to opt in or opt out of such geographically relevant advertising.

3. **It is my understanding that a second business model for targeted advertisements involves delivery via the internet.**

    a. In this scenario will the age, sex, address, and other demographic information be collected in order to deliver targeted advertising?

    Response: Given that the Next Gen TV standard is new, it is not yet known which advanced or interactive features of Next Gen TV may require viewers to provide some personal information. Broadcasters have stated that there will be opt-in procedures for the collection of consumer information, analogous to the opt-in procedures for the collection of consumer information used by smartphone apps, and that the use of any information collected will be governed by user licensing agreements of the type that are common when consumers activate

a smartphone app. If a consumer decides to provide his or her personal data, the broadcaster will be responsible for securing the data in accordance with its stated privacy and data security policies and will be subject to FTC oversight.

b. Would consumers have to provide consent in order for their data to be collected?

Response: Broadcasters have stated that there will be opt-in procedures for the collection of consumer information, analogous to the opt-in procedures for the collection of consumer information used by smartphone apps.

c. Could they choose not to provide their demographic information and not receive targeted advertisements but still receive the enhanced picture quality and public safety communications?

Response: Given that the Next Gen TV standard is new, it is not yet known how and on what terms certain aspects of the video transmissions using this standard may be offered.

d. If a consumer decides to provide their personal information, who is responsible for protecting it?

Response: In any cases in which a consumer decides to provide his or her personal data, the entity receiving that data (in this case a broadcaster) would be responsible for securing the data in accordance with its stated privacy and data security policies and would be subject to FTC oversight.

4. **It is my understanding that another business model would use an encrypted signal, even for over-the-air television broadcasts that have traditionally been free.**

a. Would this require consumers to use some sort of encryption key to access the signal?

Response: In the Report and Order, the Commission notes that broadcasters have acknowledged that free Next Gen TV signals may be encrypted. However, the Commission explicitly stated in the Order that any ATSC 3.0 programming that is encrypted must not require special equipment supplied and programmed by the broadcaster to decode ATSC 3.0 signals. Broadcast stations deploying ATSC 3.0 will also be required to simulcast their programming in the current DTV standard, so viewers will still be able to access unencrypted free, over-the-air programming.

b. Would such a key require a consumer to enter their age, address, gender, and other demographic information?

Response: The Commission explicitly stated in the Order that any ATSC 3.0 programming that is encrypted must not require special equipment supplied and programmed by the broadcaster to decode ATSC 3.0 signals. Broadcast stations deploying ATSC 3.0 will also be required to simulcast their programming in the current DTV standard, so viewers will still be able to access unencrypted free, over-the-air programming.

c. If the free over-the-air signal is encrypted and needs demographic information from a consumer to access it, do you still consider this service to be "free" in your opinion?

Response: The Commission explicitly stated in the Order that any ATSC 3.0 programming that is encrypted must not require special equipment supplied and programmed by the broadcaster to decode ATSC 3.0 signals. Broadcast stations deploying ATSC 3.0 will also be required to simulcast their programming in the current DTV standard, so viewers will still be able to access unencrypted free, over-the-air programming.

5. **There have been media reports that ATSC 3.0 would allow for better collection of audience data and would use this information as a sales tool for the advertisers, rather than relying on Nielsen or other measurement data.**

    a. Will the new standards permit broadcasters to collect data on age, sex, income, address, or any other personal information?

    Response: The new technical standards for ATSC 3.0 adopted by the Commission do not include new regulations governing the collection or use of personal consumer information by broadcasters. The Federal Trade Commission has broad authority to enforce consumers' privacy rights. Additionally, broadcasters have stated that personal data collected from ASTC 3.0 receivers will be anonymized so as not to identify individual viewers and that broadcasters will have access only to data on age, gender, and zip code, to the extent that viewers are willing to share such information.

    b. How will they be permitted to use this information?

    Response: Broadcasters have stated that personal data collected from ASTC 3.0 receivers will be anonymized so as not to identify individual viewers and that broadcasters will have access only to data on age, gender, and zip code, to the extent that viewers are willing to share such information. Additionally, any use of this information must be consistent with the particular entity's privacy and data security policies, FTC oversight, and other safeguards.

    c. Will consumers be able to opt-out of having their data collected for this purpose?

    Response: Broadcasters have indicated that there will be opt-in procedures for the collection of consumer information, analogous to the opt-in procedures used by smartphone apps, and that the use of any information collected will be governed by user licensing agreements of the type that are common when consumers activate a smartphone app.

6. **It appears that new ATSC 3.0-capable TV sets could be susceptible to hacking, malware, and other potential computer viruses that could lead to predatory advertising instead of legitimate commercials.**

    a. Is there anything contained in the proposal to address this potential problem?

    Response: There is nothing in the record to suggest that ATSC 3.0-capable receivers will be susceptible to hacking, malware, or computer viruses that could lead to predatory advertising instead of legitimate commercials. While Internet connectivity and the ability to transmit applications to TV receivers will be new capabilities to over-the-air broadcasting, these features are not new to television receiver manufacturers. Smart TVs with Internet connectivity and the ability to run applications that can download and display over-the-top media are already pervasive.

b. How many TV sets are in the country today, and what will happen to them when ATSC 3.0 is deployed?

Response: While the Commission does not maintain data on the number of television sets in use in the United States, Nielsen data indicate that there are approximately 119.6 million U.S. television households for the 2017-2018 television season~~,~~ v and it is reasonable to assume that a substantial number of these households have multiple television sets. The voluntary deployment of Next Gen TV will not affect the ability of these television sets to receive free, over-the-air broadcast television signals. This is because broadcast stations deploying ATSC 3.0 will be required to simulcast their programming in the current DTV standard to ensure that viewers can continue to receive their existing broadcast service without having to purchase any new equipment.

c. How many TV sets will need to be replaced when broadcasters are not required to carry both the current ATSC 1.0 signal and the new ATSC 3.0 signal?

Response: The Commission has not set an end date for the requirement that broadcast stations deploying ATSC 3.0 simulcast in the current DTV (ATSC 1.0) standard. The Commission has stated that it will decide this issue in a future proceeding. In addition, the record suggests that it will be possible for consumers to easily upgrade their existing television sets to receive ATSC 3.0 transmissions by connecting converter equipment, such as an external tuner dongle, set-top box, or gateway device, to the HDMI ports on their television sets. Thus, most consumers who wish to view over-the-air television in ATSC 3.0 should be able to do so without purchasing new television sets.

The Honorable Anna Eshoo

1. **Over the last year it has come to light that foreign media outlets have been using public airwaves, which are owned by the American people, to manipulate our elections and undermine our democracy. I have raised concerns in particular about RT, which the intelligence community has said they have "high confidence" interfered in our democracy. I wrote to you on May 8th urging you to consider applying broadcast transparency requirements to state-sponsored media outlets like RT so the American people can know whether foreign governments are behind the content they are viewing. Your response was ambiguous, and you refused to answer my questions.**

a. Should the Russian government, through outlets such as RT, be allowed to use our nation's public airwaves to influence our elections?

Response: I do not believe that the Russian government should be permitted to own a broadcast station in the United States. And along those lines, I would note that Section 310(b)(4) of the Communications Act establishes a 25% benchmark for investment by foreign individuals, governments, and corporations in U.S.-organized entities that directly or indirectly control a U.S. broadcast radio station license. However, to the extent that a U.S. broadcast station wishes to air programming produced by a foreign outlet, the First Amendment and the Communications Act generally bar the Commission from interfering with a broadcast licensee's choice of programming, even if that programming may be objectionable to many viewers or listeners.

b. Do the American people deserve to know whether a foreign government is behind content being broadcast on our airwaves that has a direct impact on our elections?

Response: Yes. The Commission's sponsorship identification rules require broadcast stations to disclose when they are paid or promised money, services, or other valuable consideration in exchange for the agreement to air particular programming. When this occurs, the Commission's rules require the broadcast station to announce (1) that the programming is sponsored and (2) who sponsored the programming. If RT compensated a broadcast radio or television station for transmitting RT programming, these sponsorship identification rules would apply and disclosure would be required. This requirement applies no matter the content broadcast.

c. Will you commit to applying or consider applying broadcast transparency requirements to state sponsored media outlets like RT? Yes or no. If not, why?

Response: As stated above, broadcast transparency requirements are already applied through the Commission's sponsorship identification rules.

2. **The proposed Sinclair-Tribune merger would give the new company access to over 70% of American households. Such a disproportionate share of viewer access provides Sinclair an abnormal amount of ability to influence American viewers. The American people deserve access to a competitive and independent media marketplace to provide diverse viewpoints. Competition is an essential ingredient in our nation's economy and one of the major reasons our economy has succeeded and thrived.**

a. How would consumers benefit from a single company owning 70% of the market?

Response: The reach of the combined company is an issue that has been teed up in the Sinclair-Tribune proceeding. I do not comment on specific issues raised by transactions pending at the Commission. However, rest assured that the agency is looking at the entire record in reaching its decision.

3. **In the time since you came before our committee, you have announced a Lifeline item for the November agenda that would effectively scrap a program specifically designed to help bridge the digital divide you consistently claim you want to bridge. The item would cap the program for people who depend on it despite the fact that studies consistently show capping does not address the "waste fraud and abuse" problems you're attempting to address. The item also takes particular aim at tribal communities who are uniquely disadvantaged when it comes to getting connected in the 21st Century.**

a. How do you reconcile your constant rhetoric about bridging the digital divide with the fact that your "update" of Lifeline would rob essential aid from the people who need it most and who will be left in the dust without it?

Response: I am deeply committed to promoting digital opportunity and access to modern communications services for our nation's low-income families. The Commission's November *Lifeline Reform Order* was fully consistent with this objective.

With respect to Tribal lands, the change to support facilities-based providers adopts the proposal of the *prior* Administration—a proposal that received strong support from Tribes and those that have built facilities on Tribal lands during the comment period. Additionally,

we have targeted the enhanced Tribal subsidy to rural Tribal lands where services tend to be scarcer and/or more expensive than in more urban areas—again a proposal of the *prior* Administration.

These reforms incentivize broadband deployment and curtail waste in the program by targeting enhanced Lifeline support to (a) providers that invest in or build out their own facilities and (b) residents of rural Tribal areas where the costs of providing service, and deploying and building infrastructure are high. These changes were necessary to ensure that enhanced Lifeline support serves its intended purpose of encouraging deployment and infrastructure build out on rural Tribal lands where it is most needed, rather than in cities such as Tulsa, OK. Moreover, these changes took into account discussions with and comments submitted by Tribes, Tribal organizations, and facilities-based Tribal providers advocating for the Commission to take steps to encourage broadband deployment on Tribal lands.

The November *Lifeline Reform Order* also promotes Lifeline consumer choice and ensures that Lifeline consumers receive high-quality broadband service. First, the item eliminates the "port freeze" rule that allowed Lifeline providers to lock-in Lifeline broadband consumers for a year and Lifeline telephone customers for sixty days. Second, the item clarifies that Lifeline supported mobile broadband service must use at least 3G mobile technologies and does not include sub-standard "premium Wi-Fi" services that require use at a Wi-Fi hotspot, which may not be located near the Lifeline customer's residence or may be at commercial locations (e.g., McDonald's) where free Wi-Fi is already available. Through this necessary clarification, the item ensures that low-income families receive high-quality broadband services.

Taken together, the targeted measures taken in the November *Lifeline Reform Order* will help bridge the digital divide by incentivizing further broadband deployment where it is most needed, promoting Lifeline consumer choice, and ensuring that Lifeline consumers receive quality broadband service.

The Honorable Jerry McNerney

1. **Chairman Pai, when I asked you about how your proposal to eliminate net neutrality protections would impact small businesses, you failed to directly answer my question.**

    a. **If net neutrality protections are weakened, as you propose, can you commit to me that small businesses and jobs will not be hurt in my district? Please answer yes or no.**

    Response: Repealing the *Title II Order* will lead to more investment throughout the United States, more jobs, and ultimately better, faster, cheaper broadband for consumers, including small businesses. I have no reason to doubt that what is true for Americans at large will be true for your constituents.

The Honorable Jerry McNerney and the Honorable Debbie Dingell

1. **Chairman Pai, at the Subcommittee's July FCC Oversight hearing, you committed to turning over to our offices any reports, requests, memoranda, and server logs related to the alleged May 7th DDoS attacks on the FCC's electronic systems. After receiving no response**

following your commitment, we again asked about the status of our offices' request for the above-mentioned documents. You, again, committed that you would "double-check to make sure," and that you would fulfill our outstanding request.

a. By what date can we expect you to fulfill your commitment of July 25th to produce for our offices any and all reports, requests, memoranda, and server logs related to the alleged May 7th DDoS attacks on the FCC's electronic systems?

Response: As I indicated when you made your initial request, I could not commit to a document production absent a consultation with our legal staff. I have since been advised by our Office of General Counsel that many of the materials you are requesting are non-public and confidential, because they contain personally identifiable information (PII) or information about the FCC's information security practices. The Commission has a strong interest in protecting this information from public release. As a result, before the Commission could consider sharing these documents, I would need an official letter from the Committee clearly describing the scope of the material that is being requested as well as the methods that would be used to protect the confidentiality of this information.

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C. 20554

Office of the Director

May 21, 2018

The Honorable John Thune
Chairman
Committee on Commerce, Science and Transportation
United States Senate
512 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Thune:

Enclosed please find a response to the Question for the Record submitted for Rosemary Harold regarding her appearance before the Commission on Commerce, Science and Transportation on April 18, 2018, at the hearing entitled "Abusive Robocalls and How We Can Stop Them."

If you have further questions, please contact me at (202) 418-2242.

Sincerely,

Timothy B. Strachan
Director

Additional Questions for the Record

Committee Chairman John Thune

1. **Would a longer statute of limitations improve the Commission's ability to focus its enforcement efforts against knowing and willful violators of the TCPA?**

   Response: Yes, even a one-year longer statute of limitations for enforcement of the TCPA would improve the Commission's enforcement efforts against knowing and willful violators.

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C.20554

Office of the Director

November 16, 2018

The Honorable Bill Nelson
Ranking Member
U.S. Senate Committee on Commerce, Science and Transportation
United States Senate
428 Hart Senate Office Building
Washington, D.C. 20510

Dear Ranking Member Nelson:

Enclosed please find responses to Questions for the Record submitted for Enforcement Bureau Chief Rosemary Harold regarding her appearance before the Senate Committee on Commerce, Science and Transportation's Subcommittee on Communications, Technology, Innovation and the Internet hearing entitled "Abusive Robocalls and How We Can Stop Them."

If you have further questions, please contact me at (202) 418-2242.

Sincerely,

Timothy B. Strachan,
Director

Questions for the Record from Sen. Maria Cantwell
Senate Commerce Committee Hearing:
"Abusive Robocalls and How We Can Stop Them"
10:00 a.m., Wednesday April 18, 2018 SR-253

For the Panel:

Question 1. What is the interplay between privacy and robocalls? How do robocallers get access to our private information in order to target consumers for robocalls?

Is there any evidence that robocallers share call lists with each other or on the dark web which has the potential of creating repeat victims?

Response: Taking each question in turn:

- *Interplay between privacy and robocalls*: Consumers widely consider unauthorized robocalls to be intrusive and an invasion of privacy. When Congress passed the Telephone Consumer Protection Act (TCPA) in 1991, one of the stated bases for placing additional restrictions on robocalls was that

  "… automated telephone calls that deliver an artificial or prerecorded voice message are more of a nuisance and a greater invasion of privacy than calls placed by 'live' persons. These automated calls cannot interact with the customer except in preprogrammed ways, do not allow the caller to feel the frustration of the called party, fill an answering machine tape or a voice recording service, and do not disconnect the line even after the customer hangs up the telephone. For all these reasons, it is legitimate and consistent with the Constitution to impose greater restrictions on automated calls than on calls placed by 'live' persons."

  (*See* S.Rep. No. 102–178, 102d Cong., 1st Sess. (1991) at 4-5.)

- *How robocallers get access/target consumers*: Different robocallers use different techniques, depending on the goal of the communication. For example, during his testimony before the Committee, Adrian Abramovich generally described his intention to reach certain demographics (married, over the age of 30, etc.), and explained that he targeted certain area codes in an attempt to reach consumers fitting the profile. While we make no assessment about the truthfulness of those statements, we note that the process Abramovich describes is fairly typical for target demographic-based telemarketing. Some robocall telemarketers purchase lists of phone contacts from data brokers or lead generators. Some robocallers use a scattershot or broadcast approach, hitting as many phone lines as possible in as short a time as possible. This type of robocaller tends to dial phone numbers randomly.

- *Robocallers sharing lists/dark web*: Over the course of our investigations, we have found indications that similar (or even identical) robocall scams have been perpetrated by apparently unrelated persons or entities. These indications suggest that scammers are trading information in some way.

For Ms. Harold, FCC

Question 1. Last year the FCC initiated a proceeding seeking public comment on ways to authenticate caller ID information to further secure our telephone networks against illegal robocallers. What is the status of that proceeding?

Response: A robust call authentication framework is part of the Commission's multi-pronged effort to combat the scourge of spoofed robocalls that American consumers know all too well. In July 2017, the Commission sought public input on the best way to establish a reliable system to verify caller ID information and tasked the North American Numbering Council (NANC) with recommending a governance framework. In May 2018, Chairman Pai accepted the recommendations of the NANC regarding the call authentication ecosystem, namely the adoption and deployment of "SHAKEN/STIR," the set of procedures and protocols intended to eliminate the use of illegitimate spoofed numbers from the telephone system. Industry stakeholders have now completed the first step of this process—formation of the governance authority for implementing SHAKEN/STIR. The governance authority is a stakeholder group established to determine the policies by which a carrier and its calls are considered trusted enough to "sign" calls originating on their networks. Next, a policy administrator will be established to certify carriers that are authorized to approve a call as legitimate. Finally, certification authorities will be chosen to provide the "keys" that digitally stamp a call as legitimate. Although some carriers are expected to start signing calls even before this process is complete, operationalizing this system will help all carriers sign calls, attesting to their validity from start to finish—and conversely, making clear which calls are not valid.

The Commission expects this effort to move forward as quickly as possible to protect consumers. Industry has been making progress, but success requires sustained investment in this next-generation call authentication standard. To address this, on November 5, 2018 Chairman Pai sent letters to the phone industry demanding that voice providers adopt a robust call authentication system to combat illegal caller ID spoofing and launch that system no later than next year. In particular, the Chairman sent letters asking those that have not yet established concrete plans to protect their customers using the SHAKEN/STIR framework to do so. Chairman Pai also thanked those companies that have committed to implement a robust call authentication framework in the near term.

Question 2. Would it decrease enforcement matters if the FCC adopts a call authentication system to combat illegal robocalls?

Response: Caller ID authentication appears to be an important tool to combat illegal, malicious spoofing. And illegal spoofing makes it difficult for law enforcement to locate the violators and protect consumers from unwanted communications. Accordingly, we are hopeful that, to the extent that caller ID authentication removes the ability of malicious callers to hide behind falsified information, the increased risk of detection will cause many fraudsters to cease using robocalling as a vehicle for their scams.

Questions for the Record from Sen. Cortez Masto
Senate Commerce Committee Hearing:
"Abusive Robocalls and How We Can Stop Them"
10:00 a.m., Wednesday April 18, 2018 SR-253

Ms. Rosemary Harold, Chief, Enforcement Bureau, Federal Communications Commission

Impact on Immigrants
Robocalls, and particularly those done by illegitimate businesses are obviously a nuisance and can pose a danger to anyone who receives them. But some populations are particularly vulnerable, we had a hearing in the Aging committee last fall on the impact of these calls on seniors. Another population that can be impacted is immigrants, especially those who have recently arrived or may be still developing English skills. There is some reporting suggesting that scammers actively target immigrants.

Question 1. Can any of you talk about cases where this has happened? A deliberate targeting of immigrants and non-English speakers?

> Response: Yes. For example, in recent months, the FCC has received numerous consumer complaints about Chinese-language robocalls from scammers trying to steal money or personal information by posing as Chinese consulate employees. According to multiple news reports, random consumers in areas with large Chinese communities have been targeted. The FCC issued a public notice warning consumers of the scam (available in English and Chinese), here: https://www.fcc.gov/chinese-americans-targeted-consulate-phone-scam.

Question 2. Are there any steps your agency is taking to reach these populations with educational campaigns?

> Response: Yes, the Commission extends information to immigrant populations and non-English speakers through the Commission website and via distribution of tip cards in Spanish, Korean, Tagalog, Vietnamese, and Chinese. The Commission has provided information on particular scams targeting immigrants, such as calls from scammers posing as representatives from:
>
> - Charitable organizations collecting donations in the wake of Hurricanes Harvey, Irma and Maria and most recently Hurricanes Florence and Michael.
> - Insurance companies offering additional flood insurance.
> - The IRS, seeking to collect supposedly overdue taxes.
> - Chinese embassy representatives asking for personal information.

Deterrence
There was an article in the Washington Post in January about an FTC action against a robocaller from California who had made *billions* of illegal robocalls. He was living in a wealthy neighborhood and paying $25,000 a month for his house, had a personal chef, and drove two Mercedes. The FTC brought him in for questioning and he basically admitted he did it without

remorse, he was fined $2.7 million and banned from telemarketing. While it's clear that in the digital age your agencies need more resources to police this behavior, it's evident from the article that even when cases are brought fines are often negotiated down by the perpetrators of these calls and robocallers have clearly concluded that the financial benefits outweigh and costs of this behavior.

Question 1. How does the FCC find individuals to pursue?

> Response: The Commission identifies enforcement targets principally via consumer complaints filed with the FCC's Consumer & Governmental Affairs Bureau. The FCC also accepts and may act on referrals from other governmental agencies, members of the U.S. Congress, state or local officials, and industry stakeholders. For example, USTelecom leads the efforts of an Industry Traceback Group, which attempts to identify the source of illegal robocalls and shares the results of its efforts with the Commission. To encourage further participation in the Industry Traceback Group, on November 6, 2018, the Commission's Chief Technology Officer and I sent letters to voice providers, calling on them to assist in industry efforts to trace scam robocalls that originate on or pass through their networks. In addition to complaints or referrals from third parties, Enforcement Bureau staff may identify potential violators through independent research (such as media reports or consumer complaints filed online, among others).

Question 2: If the person is found to engage other criminal behavior, such as fraud, while making robocalls how does the FCC work with other law enforcement organizations to bring charges related to those crimes?

> Response: The FCC coordinates with other law enforcement agencies at the local, state, federal, and international level. The Commission has executed Memoranda of Understanding with multiple entities to allow each entity to share relevant evidence with the other in pursuit of respective law enforcement goals. We continue to look for ways to strengthen these relationships and build processes to better and more quickly communicate with outside agencies that may have an interest in pursuing criminal charges against identified targets.

Question 3: How does the FCC ascertain what the content of the calls was and how difficult is it to prove that a person engaged in fraudulent behavior beyond just making illegal robocalls?

> Response: FCC investigators use multiple techniques to determine the content of the robocalls, including interviewing robocall victims, reviewing consumer complaints, and obtaining evidence via the agency's investigatory subpoena powers (e.g., actual recordings of the call). Proving fraud in the context of robocalling, as in any other context, presents challenges.

Question 4: Does the FCC have a sense of the size of the illegal robocalling industry? How many people or organizations are engaging in these illegal calls?

Response: We do not have a precise calculation of the number of people/organizations who deliberately make unlawful robocalls. Our data indicate that a relatively small number of entities account for a very large portion of the total number of unlawful robocalls.

Question 5: On average, how many fines does the agency levy in recent years?

Response: From January 1, 2017, through September 30, 2018, the agency has issued or proposed fines of $242,536,000.00 pursuant to the Truth in Caller ID Act (TICIDA) and the Telephone Consumer Protection Act (TCPA). From January 1, 2010 through December 31, 2016, the agency issued or proposed fines of $3,387,500 under the TICIDA and TCPA.

Question 6: Do you believe that the current fines are a significant enough deterrent, or do you think that increased levels of fines would also increase the level of deterrence?

Response: The current fines under the TCPA and TICIDA are assessed on a per-call basis, so any robocaller making millions of illegal robocalls may find itself facing penalties in the hundreds of millions of dollars. This is a significant deterrent against abuse. A more limiting factor to enforcement is likely to be the applicable statute of limitations periods. The statute of limitations is one year for TCPA violations and two years for TICIDA violations, which may not be enough time to complete investigations involving complex robocalling cases. Accordingly, the FCC's enforcement tools might be enhanced if Congress considered expanding the current statute of limitations for violations under TCPA and TICIDA.

Banking

In 2014 a couple won a lawsuit against Bank of America for more than $1 million after they were flooded with robotic collection calls over the course of several years. It is understandable that banks and other companies want to contact their customers about issues, but we cannot have financial institutions blatantly ignoring the law and instituting a policy of annoying their customers with illegal phone calls.

Question 1. Can you provide data on how many illegal calls originate from the financial industry?

Response: The Commission does not have that data.

Questions 2. Is there evidence of organizations in the financial industry systematically ignoring existing law?

Response: We cannot comment on matters that may be under investigation by the FCC's Enforcement Bureau. We encourage all aggrieved persons to file complaints on fcc.gov to alert us to illegal robocalls they have received from any industry segment. We note that in 2016, the Commission's *Broadnet Declaratory Ruling* held that the TCPA does not apply to federal government contractors, including those in the financial industry. *See Rules and Regulations Implementing the Telephone Consumer Protection Act of 1991, Broadnet Teleservices LLC Petition for Declaratory Ruling*, CG Docket No. 02-278, Declaratory

Ruling, 31 FCC Rcd 7394 (2016). There are two pending petitions for reconsideration of that decision.

Question 3. A one million dollar cost, as shown in this case, is not a significant sum for a large bank, are the financial risks great enough to discourage this behavior?

Response: As noted above, the fines for large robocalling schemes can provide a substantial financial deterrent.

Educating Seniors

I appreciate the efforts people are making in the government and private sector to hold competitions and develop apps. Ultimately, as we well know, seniors are the most vulnerable to scam calls. We have a lot of seniors moving to Nevada and a lot of retirement communities in places like Las Vegas, which received an estimated 26.7 million robocalls in March of this year. Seniors are harder to reach with some of this new technology that can be of real assistance in blocking these calls.

Question 1. Can you provide examples of how your agency is trying to educate seniors about new technology?

Response: We have undertaken a major outreach campaign to reach older Americans and alert them to robocalls scams. In September, the FCC teamed up with AARP on two tele-townhalls to inform older Americans about phone scams and what they can do to avoid being victims. We also work with the American Library Association to furnish libraries throughout the nation with FCC Consumer Guides and Tip Cards for all patrons, many of whom are 65 and over. We use information gathered from consumer complaints about robocalls to post consumer alerts concerning current scams such as "grandparent scams," "Social Security scams," "IRS scams," and others that target older Americans. We also share this information with national and local community groups.

Question 2: Is there data available on how educated our seniors on our robocalls? If so, can you please provide it?

Response: While we do our best to educate seniors and will continue our efforts to help them avoid unwanted robocalls, we do not have data on how well-informed seniors are about robocalls.

Financial Services and General Government Subcommittee
Hearing on the Federal Communications Commission
for Chairman Ajit Pai

Questions for the Record Submitted by Congressman Young

Rural Telemedicine Broadband Service

Chairman Pai—it is good to see the FCC has opened a proceeding to consider long-term reforms to benefit the Rural Health Care program. These reforms contain a much-needed increase to the RHC's funding cap—which has remained at $400 million since the program's inception. In regard to RHC funding applications, many rural health providers are concerned about the uncertainty surrounding the 2017 funding applications.

Question: How is the FCC promoting rural telemedicine broadband service to ensure health care providers do not see rate increases?

Response: The FCC's Rural Health Care Program is an essential tool for promoting rural telemedicine. This program helps health care providers afford the connectivity they need to better serve patients. Unfortunately, in Funding Year 2016, demand for this funding began to exceed the Program's spending cap. That is hardly a surprise when you consider the Program was established in 1997 during the days of dial-up, and its funding limit had never increased, not even for inflation.

I wanted to update this program to better reflect the needs of and advances in digital healthcare. So this summer, I proposed and the full FCC agreed to do just that. We increased the annual funding cap from $400 million to $571 million for Funding Year 2017. This reflects where the funding cap would have been if it had been adjusted for inflation from the beginning. Speaking of, we're giving providers more certainty by adjusting the cap annually for inflation and allowing any unused funds from prior years to be carried forward to future years.

We're also taking steps so this money is not just distributed, but distributed wisely. That's why we're aiming to end waste, fraud, and abuse in the Program. Each Program dollar that's wasted is by definition a dollar that isn't going to improve digital health. And unfortunately, some carriers have been treating the Program as a piggy bank to be raided and haven't been complying with our rules. To date, we've made real progress in rooting out this abuse, including by taking enforcement actions, and we're not going to let up until the problem is solved. America's taxpayers and patients deserve nothing less.

Finally, this past August, the FCC launched an initiative to more fully realize the potential of digital health for low-income Americans. We're considering a program to promote the use of broadband-enabled telehealth services among low-income families and veterans. Our thinking is that patients would benefit from services delivered directly in their homes—such as sensor-based remote monitoring—instead of just brick-and-mortar health care facilities. We're looking at a proposed $100 million budget for this so-called "Connected Care Pilot Program," and we are seeking public input on how best to design it.

Question: What are your plans for funding beyond 2018?

Response: Going forward, the annual funding cap of $571 million will be adjusted for inflation. Accordingly, the funding cap for funding year 2018 will be $581 million.

Question: When will rural health care providers expect to receive a funding decision for 2017 applications?

Response: Delays in funding decisions for 2017 applications are due to service providers too often being unable to show program compliance. At this point, I am pleased to report that almost all 2017 applications have already received funding decisions.

Questions for the Record Submitted by Congressman Bishop

Prison Phone Calls

You have consistently opposed the notion that the FCC has authority to determine rate caps for intra-state prison calls, which is essential for the rehabilitation of inmates by allowing them to feel connected to their families and communities.

Question: What do you think the FCC can do to mitigate the predatory practices of companies charging excessive rates and will you act on your suggestions?

Response: Congress gave the Commission authority to regulate interstate rates in section 201 of the Communications Act, but prohibited the Commission from regulating intrastate rates—section 2 of the Act makes clear that "nothing in this Act shall be construed to apply or to give the Commission jurisdiction with respect to . . . intrastate communication service by wire or radio of any carrier." The U.S. Court of Appeals for the D.C. Circuit has recognized the line Congress has drawn between interstate and intrastate communications and declined to uphold Commission attempts to regulate the latter.

I plan to continue working with my colleagues at the Commission, Congress, and stakeholders to address the problem of high inmate calling rates in a lawful manner, and build on those areas where the Commission has clear authority and can act consistent with the D.C. Circuit's decision, such as capping interstate inmate calling services at just and reasonable levels and regulating ancillary fees that affect interstate inmate calling services calls. Should Congress give the Commission authority to regulate intrastate rates, we stand ready to implement that directive.

Coordination with USDA Rural Development

The US Department of Agriculture, through its Rural Development agency, spends a lot of effort and resources to help improve the economy and quality of life in rural America. This includes loans, grants, and loan guarantees for economic and infrastructure development and essential services such as housing and health care. Related to the objectives of the FCC, USDA Rural Development also supports the development of communications infrastructure through its Rural Utilities Service.

Question: What is the FCC doing to coordinate with USDA Rural Development, and specifically the Rural Utilities Service, to ensure that your efforts are complementary rather than duplicative and that resources are effectively targeting the populations that need it the most, namely rural households that do not have access to broadband?

Response: I agree that we must ensure that taxpayer dollars are devoted to connecting unserved areas. We welcome coordination with our federal partners and private sector entities to ensure we are not duplicating efforts, and we meet regularly with the Rural Utilities Service to address this issue. The leadership of the Commission's Wireline Competition Bureau—the Bureau responsible for overseeing the Universal Service Fund—and the leadership of the Rural Utilities Service conduct periodic meetings, as do staff from each agency. Additionally, the Commission has shared information about funded areas and will continue to do so. Finally, the Bureau has filed a comment in Rural Utilities Service's recent proceeding and provided broadband performance measurements requirements that the Commission has adopted for Connect America Fund recipients.

Rural Internet Access

The FY 2019 budget request references the FCC's efforts to expand rural Internet access in a few places, but largely omits specific proposals or plans, with the exception of Mobility Fund Phase II and its stated goal of bringing wireless service access to rural Americans who currently do not have wireless service.

Question: Can you please discuss in more detail what the FCC is doing to bridge the digital divide between rural Americans and their urban counterparts?

Response: The Commission has been taking significant steps to bridge the rural-urban digital divide. In particular, the Commission is modernizing our regulations and reforming our federal subsidy programs.

First, we have modernized our rules to encourage companies to take the risks, raise the capital, and hire the crews to build high-speed networks in rural areas. For instance, we have made it easier for companies to transition away from maintaining the fading copper networks of yesterday and toward investing in more future-oriented network technologies like fiber—a key limitation in rural areas where capital is scarce. We are also taking action to make it easier and cheaper for providers to get access to utility poles and conduits. And the Commission has given the green light to potential new entrants that want to send a large number of satellites into low-Earth orbit to provide high-speed broadband. These new networks promise much faster and more reliable satellite broadband services and could help us reach the hardest-to-serve areas.

Second, we've reformed our federal subsidy program, known as the Universal Service Fund, to stretch scarce dollars as far as possible and encourage more cross-technology competition. For example, the Commission recently completed the Connect America Fund Phase II auction, which allocated approximately $1.5 billion over the next decade for fixed broadband in unserved areas, awarding funds to fixed wireless companies, electric cooperatives, and others who have shown a willingness to deploy broadband infrastructure in hard-to-serve places. Because of the way we structured the auction, we saved $3.5 billion and allowed non-traditional recipients to build out networks (with performance thresholds and accountability at the back end).

Other significant steps on the universal service front include providing $500 million in additional funding earlier this year to assist small, rural carriers in expanding broadband deployment and seeking public input on the future steps we should take so that these carriers have sufficient resources to build out broadband. We also raised the cap in our Rural Health Care program by $171 million a year and agreed to adjust the cap in future years to account for the impact of inflation. At our Open Meeting on August 2, we unanimously adopted a Notice of Inquiry to examine a $100 million pilot program to expand telemedicine. These steps will enable more rural patients, specifically low-income Americans, to access telemedicine through high-speed broadband.

Question: Specifically, what is the FCC doing to ensure that rural Americans are getting access to quality, fast broadband speeds, rather than applying a band-aid of wireless access that offers relatively low speeds with very low monthly data caps?

Response: As detailed above, the Commission has been taking significant steps to expand broadband deployment in previously unserved parts of our country. Our recent Connect America Fund Phase II auction exemplifies how the Commission is ensuring that rural Americans receive high-quality broadband services. As a result of our auction, we expect providers to deploy services to 713,176 homes and small businesses in 45 states, with 99.75% at speeds of 25/3 Mbps or higher. And over half of locations should receive service of 100/20 Mbps or higher.

HBCU Outreach

The FCC requires a lot of technical and technological expertise in its everyday work due to the technical nature of its regulations. Additionally, FCC employees are well positioned at the intersection of technology and public policy and can have a large impact in both fields.

Question: Can you please detail for me the steps that the Commission has taken to encourage minority participation in higher education that leads to communications careers?

Response: During my tenure, the FCC's Office of Communications Business Opportunities (OCBO) has partnered with a number of organizations and educational institutions to encourage minority participation in communications fields. OCBO Director Sanford S. Williams, Esq., has teamed with outside experts, including Dr. Ronald Johnson, CEO of Solutions4Change, and former Rector of the Board of Visitors at

Virginia State University (an HBCU). Together, they have participated in numerous programs, including speaking to students about FCC diversity policy initiatives, career opportunities at both the FCC and in the private communications and broadband sectors. Additionally, Mr. Williams is the Chairman of the Manassas City School Board in Virginia and has used this position to directly speak to many students about the FCC and communications careers.

OCBO also works with the Multicultural Media, Telecom and Internet Council (MMTC), and OCBO staff has met with MMTC's student law interns interested in telecommunications policy. Most recently, on July 19, 2018, Mr. Williams spoke at MMTC's "Access to Capital and Telecom Policy Conference" and met with MMTC and several law students to discuss OCBO's role at the FCC and careers within the government and in the private sector generally.

On September 12, 2018, Mr. Williams spoke at the Congressional Black Caucus event "The Future of Work" hosted by Talab Karim's STEM4Us and attended by HBCU representatives. The discussion included the Honorable Bobby Scott from Virginia, and featured an informative discussion focused on: "Preparations for the workerless economy by boosting training in autonomous vehicles, artificial intelligence, cybersecurity, health informatics and drones."

In addition, Mr. Williams speaks annually at MMTC's events and other programs related to technology and communications. These events frequently focus on bolstering the participation of minority students in higher education and communications.

Similarly, Mr. Williams has addressed other groups, including the National Asian American Coalition and the National Diversity Council, on the importance of attracting minority students to media and communications careers.

OCBO holds conferences on supplier diversity, capitalization strategies, and recently-emerging technologies. On June 4, 2018, OCBO conducted a well-attended and very successful Supplier Diversity Conference at the FCC.

In addition, OCBO routinely invites organizations such as the Latinos in Information Sciences and Technology Association, the National Association of Latino Community Asset Builders, the Asian American Justice Center, the Urban League, the National Black, Hispanic, and Asian Chambers of Commerce, and many others to advise their memberships of OCBO events.

The Commission has also revived the Advisory Committee on Diversity and Digital Empowerment (ACDDE Committee). The Committee's first meeting was on September 25, 2017 and since then it has provided advice and recommendations to the Commission regarding how to empower disadvantaged communities and accelerate the entry of small businesses, including those owned by women and minorities into the media, digital news and information, and audio and video programming industries.

ACDDE has met to consider policies and recommendations to ensure that disadvantaged communities receive the wide range of opportunities made possible by next-generation networks. This Committee has helped provide an effective means for stakeholders with interests in these areas to exchange ideas and developed recommendations to the FCC on media ownership and procurement opportunities, empowering communities to spur educational, economic, and civic development, and consumer access to digital technologies.

Question: Can you also please describe what steps the Commission has taken to encourage minority employment within the FCC?

Response: The Commission has developed a multi-faceted approach to encouraging minority employment within the FCC through its Office of Workplace Diversity (OWD) in concert with the Human Resources office. This approach is focused on both applicants and current employees, provides opportunities for enhanced intra-agency communication, and creates an optimal environment for successful mentoring, networking and personal engagement.

With regard to established professionals considering career advancement or career changes, the FCC staff is encouraged to attend a broad range of off-site organizational conferences to enhance workplace skillsets and explore new goals. For example, FCC representatives attended the Blacks in Government (BIG) National Training Institute in 2017 and 2018. FCC staff also attended the Diversity 4.0 Conference beginning on June 13, 2018 to promote the benefits of a career with the Commission.

Internally, the OWD sponsored two programs designed to educate staff on the SES hiring process. In the first program, three female SES employees summarized their career paths in a panel presentation. In the second program, FCC staff participated in a training session designed to review the Executive Core Qualifications (ECQ) requirements, and train students to draft their ECQs

In addition to providing training and development opportunities, the FCC has worked with its staff to organize three additional Employee Resource Groups (ERG) to foster equal opportunity and develop a diverse, inclusive workplace aligned with the Commission's organizational mission, values, and goals. By partnering with these groups (BIG, the Latino Group, Young Professionals and a Veterans Group), the FCC is creating unity and synergy between the groups, supervisors/managers and the union to better promote equal opportunity, diversity and inclusiveness.

With regard to students considering government and/or communications-based careers, FCC staff have attended local college and university career fairs, such as the Morgan State University Annual Career Day in Baltimore in October of 2018. We also developed and presented a video for use in places where we lacked funding for travel, featuring staff hired through the "Pathways Program." This government-wide program offers clear paths to Federal internships for students from high school through post-graduate school and to careers for recent graduates and provides meaningful training and career development opportunities for individuals who are at the beginning of their Federal service.

The FCC created an Honors Engineer Program, which targets recent college graduates with engineering degrees. And the FCC has a long-established Attorney Honors Program that targets recent law school graduates. The Commission also provides incentives to excel for existing employees in the engineering and economics areas through it Excellence in Engineering Award and Excellence in Economic Analysis Award.

Another way the FCC is encouraging minority hiring is by improving understanding and inclusiveness for minority groups, including persons with disabilities. During the past year, the OWD held six book discussions and five video presentations to promote diversity and inclusion. To improve diversity, understanding and inclusiveness within the FCC involving persons with disabilities, the FCC staff created a web-based disability sensitivity training module in which four former FCC Commissioners participated. Moreover, the FCC is using the Special Appointing authorities to hire persons with disabilities.

The FCC also revamped its Alternative Dispute Resolution (ADR) program in an effort to reduce the separation rates of minority groups. We expect this decision will have a positive effect on minority employment by reducing workplace conflict and improving communication. As part of this program, managers and supervisors attended training sessions to foster the ADR participation.

Overall, the Commission has established and institutionalized solid, holistic approaches to recruiting and retaining minority employees, and we will continue to ensure that the OWD receives the resources that it needs to create a diverse and productive workplace.

Lifeline

At the subcommittee hearing you spoke about actions the FCC had taken to provide Lifeline consumers greater choice such as addressing the "port freeze." 73% of Lifeline customers have chosen to receive their service from wireless resellers. Yet the Commission's proposed Lifeline rule would exclude resellers from the program.

Question: How is the proposed rule consistent with your previous efforts to expand consumer choices?

Response: I am committed to bridging the digital divide, and I believe the Lifeline program can help do just that. That is why the Commission adopted the *2017 Lifeline Reform Order*, which seeks to focus Lifeline support where it is most needed and incentivize investment in networks that enable 21st Century connectivity to all Americans. As you reference, the Order increased consumer choice by eliminating restrictions that barred Lifeline consumers from changing Lifeline providers for a year—a restriction that some unscrupulous wireless resellers had exploited to lock consumers into substandard service.

At the same time, I am deeply committed to ensuring that the Commission fulfills its obligation to be a responsible steward of the Universal Service Fund. It is critical to strengthen the Lifeline program's efficacy and integrity by reducing the waste, fraud, and abuse that has run rampant in this program for the better part of a decade. For example, the GAO discovered 1,234,929 Lifeline subscribers who apparently were not eligible to participate in the program as well as 6,378 individuals who apparently reenrolled after being reported as deceased. That limited sample alone constituted more than $137 million in abuse each year. And the Office of the Inspector General has calculated the Lifeline program's improper payment rate to be 21.93%—representing up to $336.39 million in annual waste, fraud, and abuse.

Wireless resellers have been the subject of the vast majority of Lifeline investigations for waste, fraud and abuse. Indeed, at our last open meeting, the Commission voted unanimously to propose a $63 million forfeiture against a wireless reseller in the Lifeline program that apparently requested and received funding for tens of thousands of ineligible Lifeline customer accounts. The company's sales agents apparently created fake or duplicate accounts by using the names of deceased people; modifying the names, dates of birth, and Social Security Numbers of actual Lifeline subscribers; reusing the same proof-of-eligibility documents for multiple accounts; listing the same single-family home addresses for dozens of accounts; and using addresses where nobody actually lived. The company apparently claimed funding for thousands of customers who hadn't been using the service for months and thousands of others who had already switched to another Lifeline provider. Month after month, the company apparently sought funding for accounts that it knew were ineligible to receive Lifeline benefits. And in August 2016—after the company told the Commission that it had taken action to ensure compliance with our Lifeline rules—the company still appears to have claimed Lifeline funding for more than 42,000 ineligible accounts. Meanwhile, the owner apparently used the company's ill-gotten gains to buy luxury items like a private jet, a Ferrari convertible, and country club and yacht club memberships.

Waste, fraud, and abuse in this important program is intolerable, which is why the Commission sought comment on several proposals last year to reform the program and crack down on abuse. We are reviewing the record in the open rulemaking proceeding while also examining how the Lifeline program can support investment in high-quality broadband networks where they are needed most—in low-income urban communities, in rural areas, and on Tribal lands.

Question: The FCC's own Mobile Competition Report that has stated in the past that wireless resellers and mobile virtual network operators (MVNOs) compliment the offerings of facilities-based providers because the MVNO may have better access to some market segments than the host facilities-based service provider, and can better target specific market segments, such as low-income consumers.

If resellers have developed an expertise in targeting low-income market segment, then why is the Commission proposing to exclude them from the Lifeline program?

Response: As stated above, it is critical to strengthen the Lifeline program's efficacy and integrity by reducing the waste, fraud, and abuse that has run rampant in the program for the past several years. The Commission is considering several different options for reforming the program and ensuring that Lifeline funds are going to support low-income families and veterans, not unscrupulous companies or luxury items for their executives. We are reviewing the record in this open proceeding and have not reached a conclusion on this issue.

Question: I understand that the FCC is proposing a "maximum discount level," or copayment requirement for Lifeline subscribers. What effect does the FCC anticipate requiring a copayment would have on already low Lifeline participation rates?

Response: The Commission is considering several different options for reforming the program and ensuring that Lifeline funds are going to support low-income families and veterans, not unscrupulous companies or luxury items for their executives. A maximum discount level is one option that would prevent unscrupulous companies from claiming non-existent subscribers and enrolling the deceased. We are reviewing the record in this open proceeding and have not reached a conclusion on this issue.

Universal Service Fund High Cost Program

The FCC recently adopted an order that put additional resources into the Universal Service Fund High Cost program, which provides ongoing support for rural networks. The order was welcome, as many members of Congress have weighed in on the High Cost budget in recent years because small carriers have put off network investments in the face of steep cuts to support demanded by the hard cap on the program. However, if nothing further is done, some rural carriers will face significant cuts to support starting again July 1, and other carriers still don't have the resources needed to accomplish what the program was designed to do.

Question: How do we ensure that the High Cost program is set up for success over the long term?

Response: I'm glad you agree that our reforms in March of this year were a big win for rural communities that want high-speed Internet access and are served by rate-of-return carriers.

The Notice of Proposed Rulemaking accompanying that March order seeks comment on ways to improve and simplify the funding system so that rate-of-return carriers have predictable support and the right incentives to efficiently invest in broadband connectivity in the rural areas they serve. We're also considering a second offer of model-based support to carriers, as well as how the legacy rate-of-return system might be improved. Like you, I believe it is a priority to ensure that small carriers can offer high-quality, affordable broadband to rural America. I look forward to working with my colleagues to put forward an order that would do just that by the end of the year.

Questions for the Record Submitted by Congressman Yoder

Lifeline Program

I am aware that the FCC is taking steps to combat issues with waste and fraud in the Lifeline Program, which provides discounted phone service to low-income individuals. As you know, fraudulent enrollment of deceased individuals has plagued the program for some time, and I am encouraged by steps the Commission has taken to reduce this problem. However, several other shortcomings with Lifeline still remain unresolved, like the verification process for ensuring that subsidy recipients meet proper income requirements. While the FCC has initiated some efforts to improve the verification mechanisms, there have been delayed and the Lifeline problems remain unresolved.

Question: Chairman Pai, I believe that you and I share a desire to combat waste and fraudulent use of taxpayer dollars. Given this goal, can you please give an update on the FCC's efforts to reduce fraud in the Lifeline Program and estimated timeframes for proposed solutions? Can you specifically address the Lifeline National Eligibility Verifier? What other avenues for Lifeline reform are you pursuing?

Response: I am deeply committed to ensuring that the Commission fulfills its obligation to be a responsible steward of the Universal Service Fund. It is critical to strengthen the Lifeline program's efficacy and integrity by reducing the waste, fraud, and abuse that has run rampant in the program for the better part of a decade.

For example, at our last Commission meeting, we proposed a $63 million forfeiture against a wireless reseller in the Lifeline program that apparently requested and received funding for tens of thousands of ineligible Lifeline customer accounts. The company's sales agents apparently created fake or duplicate accounts by using the names of deceased people; modifying the names, dates of birth, and Social Security Numbers of actual Lifeline subscribers; reusing the same proof-of-eligibility documents for multiple accounts; listing the same single-family home addresses for dozens of accounts; and using addresses where nobody actually lived. The company apparently claimed funding for thousands of customers who hadn't been using the service for months and thousands of others who had already switched to another Lifeline provider. Month after month, the company apparently sought funding for accounts that it knew were ineligible to receive Lifeline benefits. And in August 2016—after the company told the Commission that it had taken action to ensure compliance with our Lifeline rules—the company still appears to have claimed Lifeline funding for more than 42,000 ineligible accounts. Meanwhile, the owner apparently used the company's ill-gotten gains to buy luxury items like a private jet, a Ferrari convertible, and country club and yacht club memberships. This apparent fraud was and is completely unacceptable.

The Commission is also taken action to prevent unscrupulous companies from receiving federal funds in the first place. We have launched the National Verifier in 11 states and 1 territory, enabling service providers to begin optionally using the system to check consumer eligibility. Use of the National Verifier becomes mandatory in Colorado, Mississippi, Montana, New Mexico, Utah, and Wyoming effective November 2, 2018, with additional states to come on board early next year. And last year, the Commission proposed several options for incentivizing states to participate in the National Verifier program.

I also agree with you that the Commission must pursue other avenues for Lifeline reform. It simply isn't prudent to sit idly by when hundreds of millions of taxpayer dollars are at stake. To address this, in a *Notice of Proposed Rulemaking* last November, the Commission sought comment on a wide variety of measures to improve the administration of the Lifeline program—from re-empowering state commissions to police Lifeline carriers to partnering with the states to stand up the National Verifier, from improving program audits to adopting a self-enforcing budget. We are currently reviewing the record that has been compiled in response to the Notice to determine the best path forward.

Mobility Fund II

Chairman Pai, as the FCC moves ahead with the Mobility Fund II, I would like to inquire about the challenge process that has been established. I appreciate all time and effort the Commission has spent to develop a fair process. I would like to discuss with you the potential that certain aspects of the challenge process may necessitate giving parties more time than is currently envisioned.

Question: Would you support an extension to the deadline to give more communities and companies time to avail themselves of this process?

Response: I agree that the initial challenge window—150 days stretching from March 29 to August 27—may not have given all parties sufficient time to file challenges. That's why after this hearing, the Commission agreed to extend the challenge window. With an additional 90 days (a new deadline of November 26), we afford all challengers including the Kansas Farm Bureau more time to ensure that funding is directed to where it is needed. Our decision should result in a more efficient allocation of support funds, while still advancing the overall auction process to a timely conclusion and completing the phase-down of duplicative support.

Senate Financial Services and General Government Appropriations Subcommittee
"Hearing to review the Fiscal Year 2019 funding request and budget justification for the Federal Communications and the Federal Trade Commission"
May 17, 2018
Questions for Chairman Pai

Questions for the Record from Ranking Member Christopher Coons:

Question: I welcome the FCC's decision to modernize the 2.5 GHz band, also known as Educational Broadband Services (EBS), which is important for both educational and commercial users. This proceeding creates an opportunity to expand 5G to many more Americans, while also opening up new spectrum for rural broadband deployment. Both are worthy goals. Some schools and EBS licensees have contacted me to express concern about the comment period for this proceeding. The short comment and reply period, along with the fact that it may begin during the middle of the summer, might prevent their participation in the proceeding. Chairman Pai, would you be amenable to extending the comment period in order to ensure all interested parties can participate in the proceeding?

Response: I understand your concerns. That's why on June 21, 2018, the Commission extended the deadline for filing comments in this proceeding by 30 days to August 8, 2018, and to September 7, 2018 for reply comments. We determined that the number, scope, and importance of the questions asked in the 2.5 GHz NPRM warranted an extension of the comment and reply comment deadlines and that this extension would build a more comprehensive record. With this extension, commenters will have a total of 141 days to comment—from when I first released the draft in April through the reply deadline.

As you recognize, this proceeding is an essential step forward in modernizing the 2.5 GHz band. Significant portions of the EBS spectrum in this band currently lie fallow across approximately one-half of the United States, mostly in rural areas. And the 2.5 GHz band is the largest band of contiguous flexible use spectrum below 3 GHz. Moving ahead as expeditiously as possible will make available a scarce public resource that could be used to connect millions of Americans.

Question: I am happy to see that the Commission seems to be coalescing around an approach that continues to make spectrum available in the low-, mid- and high-bands. In addition to the 3.5 GHz band, I understand you are considering a plan that could ultimately free up to 40 MHz of additional mid-band frequencies in the L-band. Will you provide me an update on the status of that proceeding?

Response: On May 31, 2018, Ligado filed an amendment to its pending applications seeking changes to the ancillary terrestrial component of its L-band mobile-satellite service networks. In the amendment, Ligado proposes specific measures to protect certified aviation GPS receivers by limiting transmit power in the 1526-1536 MHz band and by observing other conditions. The record on Ligado's latest amendment recently closed. The Commission will be working closely with our federal partners, led by the National Telecommunications and Information Administration, as we review the record and determine next steps.

Question: I am concerned that in the current FCC rulemaking for the Lifeline program, the Commission has proposed to prevent wireless resellers from providing this service. This change could have the effect of removing the existing services of more than 7.5 million low-income households. In Delaware alone, about 27,000 households could lose their service. Why do you believe resellers should not be permitted to provide Lifeline service?

Response: I have not reached any conclusion as to whether resellers should be permitted to participate in the Lifeline program. However, we are looking at this issue because resellers have been the subject of the vast majority of Commission Lifeline investigations for waste, fraud, and abuse. Also, we are examining how the Lifeline program can support investment in broadband networks where they are needed most—in low-income communities in our cities, in rural areas, and on Tribal lands.

Question: How does eliminating resellers, a major market participant, promote competition in this space?

Response: This is one of the issues that we are looking at in the pending proceeding. However, I would note that competition to arbitrage the Commission's rules—whether by signing up phantom subscribers, deceased subscribers, or ineligible subscribers—does not benefit consumers. Instead, it penalizes the American people by increasing the universal service taxes they must pay each month. The Commission is still evaluating how to crack down on the waste, fraud, and abuse that has gone on for far too long. But I firmly believe the Lifeline program's goal is—or should be—to empower consumers, not companies. And that will be our lodestar as we move forward to ensure that unscrupulous companies stop abusing this important program.

Questions for the Record from Vice Chairman Patrick Leahy:

Question: At the hearing, I asked you to provide data on how your decision to repeal the 2015 net neutrality rules will spur private investment in Vermont, specifically by providing me with detail on how many currently unserved Vermonters will gain service within one year of repeal. In your response, you primarily cited Universal Service Fund programs as the reason why more Vermonters would have broadband access next year.

What percentage of new broadband investment in rural America will occur without support from the Universal Service Fund or other government funding sources such as Rural Utilities Service loans or grants?

Response: Repealing the *Title II Order* will lead to more investment throughout the United States, more jobs, and ultimately better, faster, cheaper broadband for consumers, including small businesses. Forcing innovative companies providing 21st century services through a government-controlled bottleneck—one intended for a 20th century telephone monopoly—makes deployment in rural America even harder. Just take the case of VTel, a rural broadband provider in Vermont. VTel wrote to say that "regulating broadband like legacy telephone service would not create any incentives for VTel to invest in its network. In fact, it would have precisely the opposite effect." The company went on to say that it is now "quite optimistic about the future, and the current FCC is a significant reason for our optimism." Indeed, VTel recently announced that it has committed $4 million to upgrade its 4G LTE service and to begin rolling out faster mobile broadband that will start its transition to 5G, the next generation of wireless connectivity. For your convenience, I am attaching VTel's letter to this response.

To be sure, in some areas the business case for broadband deployment will not be there absent government help. And although the Commission does not track the counterfactual data of how much investment would occur without government funding, I can say that I believe sufficient, predictable support through the Universal Service Fund is essential if we are to close the digital divide. Reducing the costs of deployment—such as by repealing the *Title II Order* and adopting one-touch make-ready rules for pole attachments—will help stretch our scarce universal service dollars farther and bring more rural Americans online.

Question: I questioned you about the troubling map the FCC put out for the upcoming Mobility Fund auction. Unfortunately, this isn't the only flawed FCC broadband map. Independent analysis of the FCC's fixed broadband map for Vermont indicates that it may undercount the number of unserved households by nearly 20,000. That is a real percentage of the population in a small state like Vermont. I am very concerned about the quality of data the FCC is relying on to develop these maps.

Was any of the data underlying these maps used as part of your analysis in the net neutrality repeal proceeding?

Response: I agree with you that accurate and reliable data is critical to sound decision-making and a vital tool in developing policies to close the digital divide, promote competition, and more. The Federal Communications Commission took into account Form 477 data in the *Restoring Internet Freedom Order*—just as the prior Commission relied on such data in the *Title II Order*. However, the Commission did not review that evidence in isolation but in the context of the broader administrative record, and specifically noted concerns raised by stakeholders about how

to construe that data. Notably, the Commission found substantial evidence in the record as a whole that Internet service providers had decreased investment following the *Title II Order* and substantial evidence that the Federal Trade Commission, consumers, and market forces could effectively police unreasonable network management practices. In contrast, the record contained a "paucity of concrete evidence" supporting the prior Administration's findings in the *Title II Order* (note that the FCC's chief economist later referred to that Order as an "economics-free zone"). And to the extent that existing Form 477 data may overstate actual deployment, that only emphasizes the importance of ending public-utility regulation of Internet service providers; we will only close the digital divide by adopting policies that encourage broadband investment, not deter it.

Nonetheless, I agree that we must improve the Form 477 data collection devised by the last Administration. That's why the Commission under my leadership commenced a rulemaking last year to review Form 477 and consider ways to improve the quality, accuracy, and usefulness of the deployment data it collects on fixed and mobile voice and broadband service, as well as examine easing the burden on industry by eliminating unnecessary or erroneous data filing requirements. Currently, Commission staff is reviewing the record of that proceeding, and I look forward to receiving staff recommendations on how to further improve that data collection.

Question: I appreciate that the FCC has put in place a challenge process to determine if areas considered served by the Mobility Fund maps have service. Given that most of Vermont is considered served by this map, I am concerned that providers and state officials that may want to conduct challenges will not have ample time to do so. I am also concerned that you are still conducting outreach in the states to explain how the challenge process will work even as the timing on the window for challenges is running.

Why did the FCC open the challenge window before concluding outreach at the state level?

Response: Our Mobility Fund Phase II outreach has been extensive and inclusive. Beginning in October 2017, Commission staff have conducted numerous meetings, webinars, and conference calls with stakeholders from numerous states, and conducted on-site training events and presentations in Texas, Tennessee, New Mexico, Kansas, West Virginia, Maine, New Hampshire, Mississippi, and Washington State. We released a map of areas most susceptible to challenge, that is, those where only one unsubsidized carrier reported offering service, so that challengers could better target their efforts. We also changed the parameters of speed testing for challengers, reducing the number of measurements required to successfully challenge an area. We released the list of qualifying handsets to the public so that local governments could more easily enlist volunteers. We have broadened the number of entities able to participate in the challenge process by granting waivers to everyone from Senator Joe Manchin (D-WV) to the Farm Bureaus of Kansas and Mississippi. In addition, the Mobility Fund Phase II webpage on the Commission's site contains all the processes, data, documents, and education and outreach materials that are available to the public.

We have worked hard to ensure that the challenge process will produce a high-quality map. I nonetheless agree with you that the agency should exercise its discretion to ensure that the process is as robust as possible. That's why I have circulated to my colleagues an order extending the length of the challenge process by 90 days—by lengthening the period during which challenges can be submitted, state and local governments and other challengers will have

a significant additional opportunity to conduct tests, which in turn means a more accurate map for carrying out the Mobility Fund Phase II auction.

Question: Will you consider extending the time available for challenges to ensure that there is both adequate time to conduct them and adequate understanding of how the process will work?

Response: Yes. I have circulated to my colleagues an order that would do just that.

Question: My friend and former Chairman of this Committee, Senator Cochran, sent you a letter on March 29, 2018, explaining the Appropriations Committee's intent in setting a national ownership cap for television broadcasters at 39 percent and its interaction with the now-obsolete UHF discount. I agree with former Chairman Cochran's assertion that the Committee did not intend for the UHF discount to be used as a loophole to the Congressionally-established 39 percent national ownership cap.

Do you agree or disagree with Chairman Cochran's assessment of the Committee's intent that the UHF discount not be used to undermine the 39 percent ownership cap? If not, please explain how Chairman Cochran's assessment was deficient.

Response: The Commission is currently in the midst of a holistic review of that regulation. In addition to asking whether we should eliminate the UHF Discount, we have sought comment on whether the 39 percent cap should be maintained, raised, lowered, or eliminated. I called on the Commission to launch such a holistic review back in 2013 and am pleased that we were able to finally take that step last December. The comment cycle on the national ownership cap Notice of Proposed Rulemaking has now closed, and we are now in the process of reviewing the record. In my view, it is important for the Commission to complete this holistic review of the national ownership cap before weighing in on the merits.

Although our assessment is ongoing, I would note that the prior Administration flatly rejected the position that the FCC lacked the legal authority to alter the 39% national ownership cap. Indeed, it specifically "conclude[d] that the Commission has the authority to modify the national audience reach cap, including the authority to revise or eliminate the UHF discount." The prior FCC explained: "We find that no statute bars the Commission from revisiting the cap or the UHF discount contained therein in a rulemaking proceeding so long as such a review is conducted separately from a quadrennial review of the broadcast ownership rules pursuant to Section 202(h) of the 1996 Act. The [2004 Consolidated Appropriations Act] simply directed the Commission to revise its rules to reflect a 39 percent national audience reach cap and removed the requirement to review the national ownership cap from the Commission's quadrennial review requirement. It did not impose a statutory national audience reach cap or prohibit the Commission from evaluating the elements of this rule. Thus, the Commission retains authority under the Communications Act to review any aspect of the national audience reach cap; it simply is not required to do so as part of the quadrennial review." In the Matter of Amendment of Section 73.3555(e) of the Commission's Rules, National Television Multiple Ownership Rule, Report and Order, 81 Fed. Reg. 89421, para. 21 (2016).

Question: A Bloomberg article from April 3, 2018, outlined a series of disturbing employment practices used by Sinclair Broadcast Group to restrict the free movement of its employees to competing broadcast stations. According to the Bloomberg report, some Sinclair employees are

subject to forced arbitration clauses as part of their employment contracts. Forced arbitration clauses strip employees of their rights and shield corporations from the consequences of harmful behavior such as discrimination or sexual harassment. Sinclair's employment contracts are reportedly even more punitive, containing clauses requiring employees to pay back 40 percent of their annual compensation if they leave before the end of the contract term.

Sinclair's practices not only restrict the rights of its employees, but also serves to stifle competition in the broadcast industry as a whole. Given the unique obligations broadcasters have due to their use of the public airwaves, I am concerned that these practices may violate the public interest.

Will you commit to investigating whether Sinclair's employment practices violate the public interest as part of your evaluation of this transaction?

Response: Based on a thorough review of the record, I had serious concerns about the Sinclair-Tribune transaction. Given these concerns, I circulated a Hearing Designation Order to commence a hearing before an Administrative Law Judge to determine whether Sinclair affirmatively misrepresented or omitted material facts with the intent to consummate this transaction without fully complying with our broadcast ownership rules. This order was approved unanimously by the Commission and released on July 19, 2018. On August 9, 2018, Tribune withdrew from the transaction, and the next day, Sinclair notified the Commission that it was dismissing with prejudice applications involving the transaction.

Questions for the Record from Senator Daines:

Question: Chairman Pai, the FCC recently issued a public notice requiring the registration of existing C Band downlink devices. This registration includes a mandatory filing fee of $435. Many of our small broadcasters in Montana who provide essential services to our rural communities have owned C Band Downlinks for years. While they are fully appreciative of the FCCs efforts to catalogue these devices and are willing to register them, many are unable to afford the mandatory fee. What can the FCC or congress do to help our smallest broadcasters afford to register devices, which they have legally owned and operated for years?

Response: As you know, increasing the usage of the 3.7-4.2 GHz band will be critical to our nation's 5G efforts as well as ensuring widespread deployment of high-speed broadband services to rural America. We must make every effort to close the digital divide, and getting the 3.7-4.2 GHz band right is critical to that effort.

Congress established the $435 application fee that earth stations now are facing when it comes to registering with the Commission. Nonetheless, because I firmly believe that we must be accommodating of those operating in smaller markets, the Commission has taken repeated steps to reduce the costs of registration for small broadcasters and cable operators. That's why Commission staff waived the costly engineering studies normally required of registrants, allowed filers to consolidate their applications to reduce application fees, and doubled the length of time for broadcasters and cable operators to register. Also, the agency may grant fee waivers or deferrals of such fees in specific instances where an applicant demonstrates good cause and the waiver would promote the public interest. I encourage entities unable to afford the mandatory fee to file a waiver request, and the Commission's staff stands ready to assist licensees with this process.

At the same time, we must move forward with the registration process. Without information about existing users, the Commission will have no way to protect rural broadcasters and cable operators that currently use earth stations to access programming. And efforts like this to free up spectrum for more high-speed broadband access throughout our country—and especially in rural America—are critical. I believe that rural consumers in places like Wisdom and St. Ignatius, Montana—each of which I visited earlier this year—have waited long enough for high-speed broadband, and we cannot as a nation afford to lose the race to 5G.

Question: Chairman Pai, one of my top priorities has been to expand broadband access to our rural and unserved communities. I know that you share this goal and the FCC has taken many steps to fulfill this mission, including approving new technologies quickly, as they come to market. What are some of the innovative technologies that the FCC sees as the next generation of expanding broadband access to rural Montana?

Response: The Commission takes an all-of-the-above approach when it comes to closing the digital divide. We have provided support to community-based rural telecom companies to build out fiber to unserved areas, encouraged wireless Internet service providers and electric cooperatives to participate in our Connect America Fund Phase II auction, and made it easier for competitive entrants to gain access to utility poles and otherwise install high-capacity fiber. And I'm excited about innovative technologies that could help close the divide even further: under my leadership, the FCC has authorized new constellations of satellites that hold the potential for

ubiquitous broadband coverage, has set up the first 5G spectrum auctions (necessary for 5G services, which hold potential to boost access in rural areas), and is studying the results of the experimental license granted to Alphabet for Project Loon, which aimed to use balloons to supply Internet access to Puerto Rico following Hurricane Maria.

Question: Chairman Pai, as the commission continues to work on Mobility Fund Phase II, I have heard concerns from rural providers, specifically, in regard to securing VoLTE agreements, who fear that certain changes may hurt their ability to service our most rural areas. Do you commit to continue to work with all stakeholders to ensure that the Mobility Fund Phase II is balanced and effective?

Response: Yes. We have worked to ensure that this process is transparent, balanced, and fair to all parties and provided extensive outreach to assist participants. Importantly, we have adopted a flexible approach, and I recently circulated to my colleagues an order that would extend the challenge process to maximize stakeholder participation.

Questions for the Record from Senator Jerry Moran:

Question: According to the FCC's 2018 Broadband Deployment Report, the *Title II Order* drastically harmed broadband deployment in the two years following its adoption in 2015. Could you please explain the findings of this report?

Response: The 2018 Broadband Deployment Report demonstrates that the pace of both fixed and mobile broadband deployment declined dramatically in the two years following the prior 2015 *Title II Order*. From 2012 to 2014, the two years preceding the *Title II Order*, fixed terrestrial broadband Internet access was deployed to 29.9 million people who never had it before, including 1 million people on Tribal lands. In the following two years, new deployments dropped 55 percent, reaching only 13.5 million people, including only 330,000 people on Tribal lands.

From 2012 to 2014, mobile LTE broadband was newly deployed to 34.2 million people, including 21.5 million rural Americans. In the following two years, new mobile deployments dropped 83 percent, reaching only 5.8 million more Americans, including only 2.3 million more rural Americans. And from 2012 to 2014, the number of Americans without access to both fixed terrestrial broadband and mobile broadband fell by more than half—from 72.1 million to 34.5 million. But the pace was nearly three times slower after the adoption of the 2015 *Title II Order*, with only 13.9 million new Americans gaining access to both over the next two years.

Question: Modernizing the federal government's IT systems needs to remain a top-priority for all agencies. According to the GAO's High-Risk Series report, the federal government annually spends over $80 billion on information technology (IT), but more than 75 percent of this spending is for "legacy IT". Earlier this year, I was successful in getting the FCC CIO Parity Act signed into law. This law requires the FCC to ensure that the agency's Chief Information Officer (CIO) has a significant role in the budgeting, programming, and hiring decisions of the agency, and given the CIO's subject matter expertise, prioritizing the replacement of costly and vulnerable legacy IT systems would be accounted for in this critical decision-making. Will you please describe the current role of the FCC's CIO in the agency's efforts to formulate an effective and targeted budget? What are the FCC's specific budget priorities related to modernizing its IT systems?

Response: I appreciate your ongoing and substantial commitment to ensuring that the Federal Government has robust and resilient Information Technology (IT) resources. It is essential that CIOs feel empowered to make critical decisions essential to upgrading and modernizing our IT systems. I am pleased to note that our Acting CIO currently plays an important role in working with our Managing Director and my office to develop our budget and allocate resources.

Our top budget priority related to IT modernization is to end our reliance on outdated legacy systems by moving systems and applications to the cloud. Such efforts not only improve the quality of our IT services, they also decrease expenses in the long run because it is quite expensive to keep many of our legacy systems running.

Consistent with this priority, in our Fiscal Year 2019 Budget Request, we have asked for $8,535,200 for IT modernization and implementation, including $4,619,000 for shifting systems to the cloud and $3,666,200 for shifting applications to the cloud. In fact, this request comprises the vast majority of the new spending contained in that budget request. Pages 20-24 of the FY19

Request provide a complete narrative of changes to our salaries and expenses from the prior fiscal year.

Moreover, it is important to note that we recently received approval for a reprogramming that would move de-obligated resources to current IT needs through the end of the fiscal year, improving our security and redesigning our Electronic Comment Filing System.

Question: As your written testimony mentions, the recent omnibus appropriations package for FY2018 included up to one billion dollars in funding to complete the broadcaster "repacking" process following the spectrum incentive auction. This continues to be an issue that I will closely monitor. What types of administrative resources are expected to be needed by the commission, including staffing and IT, to effectively distribute these new allocated funds?

Response: The process for establishing the new funds for LPTV stations, translators, and FM stations is expected to cost more than $17 million in fiscal year 2019. I am pleased that the Administration, the House, and the Senate have recognized these additional costs and so far supported the necessary increase to our auctions cap.

Based on our experience with the initial fund administration costs, our staff developed the following cost analysis:

- Increase in the Number of Eligible Entities: The new legislation could increase the number of participants in the TV Broadcast Relocation Fund by over 4,000, increasing the number of participants from 1,134 to over 5,000.
- Fund Administrator Cost Increase: Based on the increase in the number of eligible entities and taking into consideration economies of scale and the possibility that there may be fewer invoices from each participant, the cost of the fund administrator is anticipated to substantially increase. The FCC has estimated a cost increase of a minimum of $7 million in 2019.
- Cost Catalogue of Eligible Expenses: The Cost Catalogue of Eligible Expenses must be expanded to include costs for LPTV stations and translators, which are typically substantially lower than those for full power television stations; receivers for translators; and costs for FM stations.
- System Development: Three major computer systems will need development work to handle the expanded program. All systems must be updated—including thorough testing of the development, system integration and security—prior to the start of cost estimate and/or invoice submission process which is anticipated to be third quarter 2019. The cost is estimated to be approximately $5 million.
- Compensation and Benefits: Comp and Benefits for the Incentive Auction Program averaged approximately $9 million per year from 2014 through 2016. Additional staff time will be needed in financial operations, Media Bureau, Information Technology, Incentive Auction Task Force, Office and Engineering and Technology, and Office of the General Counsel.

Below is a chart outlining these costs:

Expenditure: LPTV/Translators Stations & FM Stations	**FY 2018**	**FY 2019**
Comp and Benefits	**$1,000,000**	**$5,000,000**
Fund Admin	$1,000,000	$7,000,000
Site Visits	$0	$0
Internal Controls & Audits	$0	$500,000
Systems	$1,000,000	$5,000,000
Cost Catalogue	$300,000	$0
Outreach - LPTV & Translators	$0	$50,000
Subtotal	**$2,300,000**	**$12,550,000**
Total	**$3,300,000**	**$17,550,000**

Question: As you know, the FCC released an Order and NPRM in March regarding the USF's High Cost Program. The Order restored the federal support that small, rural broadband providers had seen cut over the past year. However, that money is expected to run out soon, and small carriers will once again face significant cuts when the new fiscal year takes effect on July 1, 2018. I recently signed a letter with over sixty of my Senate colleagues requesting the FCC take action to provide predictable and long-term efficiencies to the program. How does the FCC plan to modernize the High Cost Program to better enable small carriers to offer high quality, affordable broadband to rural Americans?

Response: I'm grateful for your advocacy on this issue and hope you will agree that our reforms in March (which reflect the views you expressed in your letter) were a big win for rural communities that want high-speed Internet access and are served by rate-of-return carriers.

The NPRM seeks comment on ways to improve and simplify the funding system so that rate-of-return carriers receiving have predictable support and the right incentives to efficiently invest in broadband connectivity in the rural areas they serve. We also consider a second offer of model-based support to carriers, as well as how the legacy rate-of-return system might be improved. The public comment and reply period cycle for the NPRM closed on June 25, 2018. Like you, I believe it is a priority to ensure that small carriers can offer high-quality, affordable broadband to rural America. I look forward to working with my colleagues to put forward an order that would do just that before the year is over.

Question: Consistent with the direction in my legislation, the RAPID Act, the Commission recently approved a major order streamlining the environmental and historic preservation process for deploying small cells. As I understand it, that order, when the new rules become effective this summer, will significantly expedite the deployment of new facilities needed to support 5G

services. I congratulate you on this achievement. What more needs to be done? What are the Commission's next steps?

Response: I appreciate your hard work and attention to this matter and your support for moving ahead to ensure that we facilitate, not frustrate, innovation and investment. Since I established the Broadband Deployment Advisory Committee (BDAC) in January 2017, the Commission has received significant and comprehensive advice on how to accelerate deployment of broadband. We have taken a number of actions designed to accelerate the deployment of next-generation networks and services through streamlining unnecessary rules that raise the cost of infrastructure investment and eliminating other regulatory barriers to deployment.

The Commission's March 22, 2018 Order represents an essential step in this process. While old rules were designed with 200-foot towers in mind, we are now looking at the highly-densified networks of small cells that will be common in the 5G world. By streamlining the environmental and historic preservation process for deploying small cells instead of treating them like larger towers, we will make it substantially easier for carriers to build next-generation wireless networks throughout the United States. That means faster and more reliable wireless services for American consumers and business as well as more wireless innovation, such as novel applications based on the Internet of Things.

More recently, the Commission adopted an order containing the BDAC's proposal for one-touch make-ready with respect to pole attachments. The record suggests this order will substantially speed up broadband deployment while at the same time ensuring that appropriate safeguards are in place to protect existing attachments and worker safety.

Question: The recent Omnibus included language directing the Commission to report to Congress by the end of this fiscal year, and annually thereafter, regarding upcoming spectrum auctions and bands that might be made available for commercial use. Do you believe the Commission can meet this objective as well as detail for us the use of the money the Commission retains to administer its spectrum auction activities?

Answer: Yes, the Commission is moving ahead to obtain and analyze the data and information required by Division P of the Fiscal Year 2018 Consolidated Appropriations Act, or Omnibus. We expect to meet all deadlines.

Question: Is it true that the FCC under your leadership proposed to impose on Sinclair the Commission's largest forfeiture ever for a violation of the Commission's sponsorship rules?

Response: Yes. Last December, the Commission proposed a forfeiture against Sinclair Broadcast Group of over $13 million for alleged sponsorship identification rule violations. It is the largest fine ever proposed for sponsorship identification rule violations.

Question: I welcome the FCC's decision to modernize the 2.5 GHz band, also known as Educational Broadband Services (EBS), which is important for both educational and commercial users. This proceeding creates an opportunity to expand 5G to many more Americans, while also opening up new spectrum for rural broadband deployment. Both are worthy goals. Some schools and EBS licensees have contacted me to express concern about the comment period for this proceeding. The short comment and reply period, along with the fact that it may begin during the

middle of the summer, might prevent their participation in the proceeding from educators and teachers who benefit from EBS services. Would you be amenable to extending the comment period in order to ensure all interested parties can participate in the proceeding?

Response: I understand your concerns. That's why on June 21, 2018, the Commission extended the deadline for filing comments in this proceeding by 30 days to August 8, 2018, and to September 7, 2018 for reply comments. We determined that the number, scope, and importance of the questions asked in the 2.5 GHz NPRM warranted an extension of the comment and reply comment deadlines and that this extension would build a more comprehensive record. With this extension, commenters will have a total of 141 days to comment—from when I first released the draft in April through the reply deadline.

As you recognize, this proceeding is an essential step forward in modernizing the 2.5 GHz band. Significant portions of the EBS spectrum in this band currently lie fallow across approximately one-half of the United States, mostly in rural areas. And the 2.5 GHz band is the largest band of contiguous flexible use spectrum below 3 GHz. Moving ahead as expeditiously as possible will make available a scarce public resource that could be used to connect millions of Americans.

Questions for the Record from Senator Van Hollen:

Question: During the Restoring Internet Access NPRM there were reports that over 2 million comments were submitted using fake or false information. Some comments were fraudulently submitted using the names and addresses of real Americans, some of whom were not alive. Your colleague Commissioner Rosenworcel said half a million of the fake comments originated from Russian email addresses.

Chairman Pai, the FCC's budget request includes an $8.5 million plus up for IT investments designed to move the old systems into modern day cloud operations. Does this $8.5 million investment include funding to update the public comment system to ensure that there are no cyber-intrusions in our public filing system?

Response: The FCC recently received approval of a reprogramming request from the Committee to fund the redesign of ECFS, and this redesign will take into account the need to have a secure system.

Question: Chairman Pai, last year Montgomery County Executive Leggett and others met with you to request that the FCC complete its RF emissions proceeding that has been open since 2013. During the FSGG hearing, Senator Lankford asked you:

> How are you getting information out on [health concerns] and [how are you] also being attentive on any health concerns that individuals may have?

You replied:

> We are not the health experts when it comes to these issues. We have consulted of course with the federal Food and Drug Administration and with others who are responsible for determining what those standards should be. And we are confident that our standards are ones that are healthy for consumers going forward.

When and with whom has the FCC consulted with about federal RF emissions?

Please summarize the results of your consultations with the FDA and any other agencies you have met with and provide the Committee with any analyses or relevant documents the FCC has on this matter.

Response: The RF exposure standards in our rules have been supported by the federal agencies with health expertise and the standards are similar to those used around the world. These standards protect the general population from any type of transmitter—whether it is 4G, 5G, Wi-Fi, or any other kind of radio transmitter. We are working with the Food and Drug Administration as well as other federal partners that provide health standards on these issues. Most recently, Dr. Jeffrey Shuren, head of the U.S. Food and Drug Administration's Center for Devices and Radiological Health released an announcement related to this issue: https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm595144.htm. Among other things, he said, "Based on this current information, we believe the current safety limits for cell phones are acceptable for protecting the public health."

Question: You state your "confidence" in the standards. Will you commit to conclude the RF study and release its findings publicly within six months?

Response: Because our review process is dependent on the reviews of our federal partners, I cannot commit to a particular timeline. Nonetheless, I do hope to finish our work in the near term.

Question: The 5G rollout promises to connect Americans like never before. Municipalities in Maryland are working with providers to ensure that both rural and urban communities across the state are included and covered.

Do you think cities and counties should be able to negotiate buildout to underserved areas or support for digital inclusion, in exchange for use of public property?

Response: The Commission's Broadband Deployment Advisory Committee recently and unanimously approved a Municipal Model Code that details what cities and counties should be able to do to facilitate deployment and close the digital divide. Especially important for every level of government is the need to reduce regulatory barriers to deployment and consider providing support to fund buildout where there is no business case. And these initiatives work hand in hand, for every dollar saved through the avoidance of unnecessary regulatory barriers and taxes in our cities is a dollar that can be used to expand access in our rural communities that have been too long left behind.

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C.20554

Office of the Director

August 31, 2018

The Honorable Marsha Blackburn
Chairman
Subcommittee on Communications and Technology
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Blackburn:

Enclosed please find responses to Questions for the Record submitted for Chairman Ajit Pai regarding his appearance before the Subcommittee on Communications and Technology on July 25, 2018, at the hearing entitled "Oversight of the Federal Communications Commission."

If you have further questions, please contact me at (202) 418-2242.

Sincerely,

Timothy B. Strachan
Director

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Attachment—Additional Questions for the Record

The Honorable Greg Walden

1. Our colleague Congressman Tom Cole, who chairs the House Appropriations Subcommittee on Labor, HHS, and Education, sent you a letter recently asking for your assurance that transitioning C-Band frequencies for wireless services would not degrade or impair public radio's programming distribution and public safety function.

   As you know, public radio relies on C-Band frequencies to distribute 450,000 hours of programming annually, 80 percent of which is live, to 42 million Americans each week—including in rural and remote areas where citizens rely on their local public radio station because there are few or no alternative sources of news and emergency information. Will you please provide Congressman Cole and our Committee with your plan to protect public radio's satellite-based programming distribution and public safety activities while making more intensive use of the band?

   Response: I agree with you on the importance of protecting broadcast and cable earth stations as we increase terrestrial use of the 3.7-4.2 GHz band, commonly called the C-band. At this time, the Commission is collecting data from incumbent earth stations and public radio stations in order to have an accurate picture of how the spectrum is currently being used. Without this information, we will have no way to protect public broadcasters that currently use earth stations to access programming. Because we have not yet collected all the information we need, we have not yet decided on a specific plan to protect public radio's satellite-based programming distribution and public safety activities, but please be assured that protecting these functions is a priority for us as we make more intensive use of the band.

2. Since the oversight hearing, you announced a circulation order to extend the Mobility Fund Phase II challenge process by an additional 90 days. With $4.53 billion at stake to support 4G LTE service in unserved areas, how can you assure the Committee the extended challenge process will be sufficient to update the map with more reliable data to determine eligible areas?

   Response: As you know, the Commission's legacy support for mobile services has been poorly targeted. All too often, it has supported buildout in areas where private capital has already invested and provided duplicative support to more than one carrier in the same area, while leaving states like Oregon with less funding than they need to ensure universal service. The Mobility Fund Phase II auction will redirect funding to unserved areas—like Eastern Oregon—helping us fulfill our goal to bring digital opportunity to all Americans. I am pleased that the Commission voted recently to extend the challenge process for an additional 90 days. Based on the record, this additional 90 days should ensure that stakeholders have adequate time to challenge the maps submitted by mobile providers while ensuring that we're able to move forward with the auction in a timely manner.

The Honorable Marsha Blackburn

1. Chairman Pai: I understand the FCC has taken a number of actions to stop unwanted calls from reaching consumers and is looking into this issue through a variety of pending rulemakings. This is another example of the FCC and FTC working together, and I commend all of you for that. Can you give us an update on when we might see additional steps taken from the rulemakings that are currently pending before the FCC?

   Response: Unwanted robocalls are consumers' top complaint to the FCC, and we have accordingly made combating illegal robocalls our top consumer protection priority. We have aggressively enforced the TCPA as well as the Truth in Caller ID Act, leveling $120 million of fines and proposing more than $82 million in fines, respectively, against two robocallers who engaged in illegal spoofing on a massive scale. We have authorized carriers to stop certain robocalls at the source while we pursue the creation of a reassigned numbers database and a robust call-authentication framework. And we have been working with our colleagues at the Federal Trade Commission, hosting a policy forum in March and a tech expo in April.

   We will continue our work this fall to combat unwanted robocalls. We are currently studying the record in response to our open rulemakings regarding a reassigned numbers database and additional opportunities for carriers to block illegal robocalls. In addition, we are closing loopholes in our rules that allow robocallers to profit through regulatory arbitrage (e.g., with toll-free calls), and we are working with carriers to implement a call-authentication framework by next year so that consumers can once again trust Caller ID. Finally, we are studying the record in response to the March decision by the U.S. Court of Appeals for the District of Columbia in *ACA International v. FCC*, which struck down much of the agency's 2015 interpretation of the Telephone Consumer Protection Act. I look forward to working with you and my colleagues to continue our crackdown on what former Senator Fritz Hollings once rightfully deemed the "scourge of civilization."

The Honorable John Shimkus

1. I understand that the National Association of Regulatory Utility Commissioners recently passed a resolution raising concerns regarding the implementation of the National Verifier and the absence of Application Programming Interfaces (APIs) that allow for automated interaction between consumers, carriers and the National Verifier when consumers are attempting to enroll in Lifeline with carriers. NARUC is concerned that the absence of these APIs will make it unnecessarily difficult for eligible consumers to enroll. I understand you also have a petition before you asking the FCC to address this. I also understand that the National Lifeline Accountability Database already uses similar APIs. Are you are reconsidering reinstating APIs as part of the National Verifier and whether they should be part of the design, and if so, will you complete any decision-making before "hard launch" of the National Verifier?

   Response: As you know, the Commission created the National Verifier in response to widespread waste, fraud, and abuse in the Lifeline program, with the goal of eliminating the role of carriers in verifying the eligibility of consumers. A carrier API could give the very companies that have previously abused the Lifeline program direct access to the National Verifier. In light of the $137 million in abuse that the Government Accountability Office discovered in the Lifeline program last year, we must be careful in designing any carrier API to mitigate the ability of unscrupulous carriers to evade the screening role of the National Verifier.

   As such, we have not made a final decision on whether to include a carrier API in the National Verifier. We continue to study the National Verifier's functioning to determine whether one is necessary and whether one can be designed without undermining the National Verifier's work of reducing waste, fraud, and abuse in this important program. In the meantime, carriers are able to work with consumers in person using the National Verifier's service provider portal.

The Honorable Robert E. Latta

1. What steps have you taken to reduce regulatory burdens for small entities, and what do you have planned for the future?

   Response: Federal regulations have a disproportionate effect on small businesses. This is unfortunate in several respects: small businesses are often the linchpin of a more competitive marketplace or are critical to providing access in the first place, and they simply don't have the resources of their larger competitors to comply with complex regulatory schemes. Accordingly, the FCC has taken numerous actions to reduce regulatory burdens on small entities. For example, last year we eliminated the onerous reporting requirements imposed by the last Administration on small Internet service providers in the *Title II Order*, and then later eliminated the regulatory overhang of that same order. Also last year, we eliminated unnecessary reporting burdens on small providers participating in our universal service high-cost programs. In June of this year, we eliminated a rule that penalized small rural carriers with extra Universal Service fees whenever they offered broadband. The Commission also hosted a workshop to help small business entrepreneurs navigate corporate supplier diversity programs. And in August, we launched an incubator program in the radio industry where an established broadcaster will provide financial and operational support, including training and mentoring, to a new or small broadcaster.

   And we're not finished yet. For example, we have proposed to eliminate many of the legacy burdens for small, model-based carriers serving businesses in rural America—burdens that unnecessarily divert funding away from build-out of broadband toward paperwork. I look forward to working with you and my colleagues to continue this work.

2. I have over 20 telecommunications companies operating in my district. The majority are small businesses in rural areas that are recipients of USF. I'm concerned that the uncertainty of budget controls in the USF High-Cost program is stifling investment and preventing rural Americans from getting the broadband they deserve. I know the Commission has taken steps to address USF budget shortfalls in some of the programs, but the High-Cost program hasn't had a recent recalibrated budget, or an inflationary factor applied to it. Are you considering addressing the concerns with the High-Cost program in a manner similar to how the FCC has addressed the other USF programs?

   Response: I agree with you that the *2016 Rate-of-Return Reform Order* has not lived up to its promise—and some decisions of the prior Administration like the budget control mechanism require revisiting. That's why I led my colleagues earlier this year to increase funding for small carriers and to propose changes to that prior order to respond to its many shortcomings. Later this year, I aim to circulate an order that will boost funding for small companies deploying broadband to rural America, while considering other reforms to ensure that money is spent wisely, and funding is more predictable going forward.

The Honorable Brett Guthrie

1. When it comes to describing the Commission's work within global fora such as the ITU or others, what role do you believe the Commission should play as an influential voice on spectrum policy and connectivity? This could be in relation to other U.S. agencies and foreign policy makers or relative to domestic and foreign stakeholders.

   Response: The FCC should play a leading role on spectrum policy and connectivity both here at home and abroad—and it does. We are working within the U.S. to establish a policy environment that encourages the development and deployment of new technologies and high-speed networks for all consumers. And internationally, we are working to harmonize spectrum allocations for next generation terrestrial mobile and satellite services while focusing on connectivity—the core of ITU's mission—to help promote more innovation and greater international unity. To build support for our positions in the ITU, we engage extensively on a bilateral and regional basis—sharing regulatory best practices and encouraging innovative spectrum policies. I personally have participated in numerous multilateral and bilateral meetings and have aggressively promoted various American positions on communications policy with regional representatives like Europe's BEREC and individual countries as varied as the Bahamas and Bahrain.

The Honorable Gus M. Bilirakis

1. The Final National Verifier Plan reviewed by the Commission and released by the Universal Service Administration Company (USAC) in January 2017 included plans to design application programming interfaces (APIs) both between the National Verifier and state eligibility databases, and between the service providers and the National Verifier to facilitate modern machine-to-machine interaction necessary to ensure efficient and effective enrollment processes for eligible Lifeline subscribers.

   How does the Commission expect these two verification systems to operate with each-other in order to verify an eligible Lifeline applicant? For example, will the applicant be tasked with providing proof of state eligibility to the service provider upon approval (siloed interfaces) or will the two verification systems interact autonomously to prove who a particular applicant is and their eligibility?

   Response: With the National Verifier, carriers do not verify subscriber eligibility and do not retain eligibility documents. The National Verifier is designed to work in an integrated fashion with other databases and has two online methods for obtaining a subscriber eligibility determination: a carrier portal (used when the carrier representative is present with the consumer) and the consumer online portal (used when the consumer is applying without in-person carrier assistance). Consumers also have the option of mailing in a paper application along with their supporting eligibility documents. For consumers who are enrolled through the carrier portal, carriers have immediate access to their customer information and eligibility determination in the National Verifier system. For consumers who are enrolled in the consumer portal or via a paper application, the consumer must first select a specific carrier and give that carrier his information and National Verifier number in order for the carrier to access that consumer's information and eligibility determination in the National Verifier system. Carriers will still need to enter and maintain consumer records separately in their customer relationship management system.

2. As a follow up to your testimony during the hearing on the Telephone Consumer Protection Act (TCPA), does the FCC need any additional authority from Congress in order to adequately address issues related to TCPA and robocalls that could enhance your ability to fight bad actors?

   Response: We have found that unlawful robocalling and unlawful spoofing tend to go hand-in-hand. The Truth-in-Caller-ID Act, which governs spoofing violations, does not require the Commission to first issue a citation against non-carriers; we can go directly to a Notice of Apparent Liability. It also provides a two-year statute of limitations. We would welcome legislation that eliminates the citation requirement and provides for a two-year statute of limitations for TCPA actions as well, allowing us to pursue robocalling and spoofing violations in a more coordinated manner.

The Honorable Bill Johnson

1. Earlier this year, 130 members of the House, including many members of this Subcommittee, sent a letter thanking the FCC for providing additional resources in the Universal Service Fund (USF) High-Cost Program for areas served by smaller rural broadband providers.

   While we are very thankful that all of you at the FCC helped to address the USF budget shortfalls in the last fiscal year, a new budget cut took effect last month that will reduce USF support on average by 15.5%—or about $230 million—over the next 12 months. This budget control keeps growing every year, taking more and more USF support away from companies. Companies that elected model USF support are also not able to deliver on what they had hoped to due to funding shortfalls.

   It's my understanding that your agency is taking a fresh look at these budget concerns and trying to address sufficiency in the program.

   a. After having made significant positive changes to the budget of the Rural Health Care Program recently, the High-Cost Program is the only USF program without a recently recalibrated budget or an inflationary factor applied to it. Are you considering addressing the concerns with the High-Cost Program in a manner similar to how the FCC has addressed the other USF programs?

      Response: I agree with you that the *2016 Rate-of-Return Reform Order* has not lived up to its promise—and some decisions of the prior Administration like the budget control mechanism require revisiting. That's why I led my colleagues earlier this year to increase funding for small carriers and to propose changes to that prior order to respond to its many shortcomings. Later this year, I aim to circulate an order that will boost funding for small companies deploying broadband to rural America, while considering other reforms to ensure that money is spent wisely, and funding is more predictable going forward.

   b. Would any steps you take aim to address sufficiency concerns and provide more support both for those small carriers that adopted model support as well as those that are being hit by the 15% budget control right now?

      Response: Yes.

   c. Can you commit to a vote by the end of this year to address these concerns?

      Response: I commit to circulate an order to my colleagues addressing these concerns later this year.

The Honorable Bill Flores

1. The record in the 6 GHz Notice of Inquiry includes studies that show potential interference from unlicensed operations to mission critical communications systems, and there are concerns regarding mitigation strategies to reduce the potential for interference. If the FCC does expand the 6 GHz band to include unlicensed operations, how does the FCC plan to develop technical rules and implement mitigation capabilities to protect incumbent mission critical communications against interference?

   Response: The record developed by the *Mid-Band NOI* reflects how greater unlicensed use in the 6 GHz range could facilitate the introduction of 5G services and help close the digital divide. A fundamental principle of unlicensed spectrum policy is that operations may not cause harmful interference to licensed services. I anticipate that the Commission's 6 GHz rulemaking process will foster proposals that protect incumbent services while allowing more intensive use of the band. Our staff will review that record and ensure that we can adequately protect existing users before proceeding to a final rule.

The Honorable Susan W. Brooks

1. Bridging the digital divide in rural areas remains a challenge, particularly regarding wireless connectivity. Since deployments by Educational Broadband Service (EBS) licensees and leasing partnerships with small wireless operator have been successful in delivering wireless broadband services in hundreds of rural communities, do you see a feasible opportunity to extend this successful model to areas where EBS has not been licensed before considering auctions?

   Response: In May, the Commission unanimously voted to begin a proceeding that proposes to allow more efficient and effective use of the EBS band. The Notice of Proposed Rulemaking asks about giving existing EBS licensees, along with other educational entities and rural Tribal communities, the chance to obtain new local priority licenses before auctioning off the remaining white spaces. Our proposals also seek to give current users more flexibility, such as standardizing license areas and eliminating outdated restrictions on lease terms and how the spectrum is used. I look forward to reviewing the record and am hopeful that in the end we will be able to make more spectrum available for high-speed wireless broadband.

2. I introduced H.R. 5329, the Poison Control Center (PCC) Network Enhancement Act, which will help improve Americans' access to poison control center services during an emergency. I'm proud that this bill was packaged into H.R. 6, the SUPPORT for Patients and Communities Act, however there is one provision aimed at improving call routing accuracy for PCCs we pulled from the bill, so we could further explore how to best go about addressing the issue. The provision would have:

   - Requested enhanced communications capabilities such as texting be established
   - Requested the FCC work with HHS to ensure calls to the 1-800 number are properly routed
   - Directed HHS to implement call routing based on a caller's actual location to ensure timely responses

   Currently, calls to the poison control center's 1-800 number are routed based on the area code associated with the phone number of the caller. For example, if I (Susan Brooks) am in Washington, D.C. and call the poison control center's 1-800 number with my personal phone (Indiana area code 317), I would be connected to the center in Indiana, rather than a center closer to my actual location in Washington, D.C. This could present a problem in situations where a caller is in an area with a specific poisoning danger that might not be as well known to the poison control center staff in another location. PCCs standardize training across all regions, but it is still practical to assume that certain region's will be more familiar with certain situations. For example, if you visit California and are bitten by a rattle snake and call the poison control center's 1-800 number, you would be directed to the poison control center in Indiana, which is likely not as well equipped with knowledge and experience regarding the treatment of a rattlesnake bite as someone in a California location. In this instance, as with most poisoning situations, timing is critical. It is important that the caller be directed as quickly as possible to the poison control center closest to where they are currently located.

a. Are you aware of this issue with call routing accuracy with regard to PCCs?

Response: Yes, the Commission is aware of this issue with call routing from wireless phones, both in the context of Enhanced 911 calling and also for calls to the PCC toll free number and other emergency numbers. In addition, we are aware of commercial solutions available in the toll free services marketplace that can provide call routing based on the rough location of a wireless caller. Such capability is available via the Responsible Organization (RespOrg) that manages the toll free number for the toll free subscriber.

b. Working on this issue made me wonder what we can learn from other emergency lines, like the Suicide Hotline and Veterans Crisis Lines to improve 9-1-1 and vice versa. Can you elaborate on what some of these potential similarities and learning opportunities might look like, and what, if any, role the FCC could play?

Response: The Commission's success in establishing location-based call routing with Enhanced 911 has resulted in an ecosphere of location-based technologies and providers, and the extension of such capabilities beyond 911 calling into other wireless calling and related applications, such as commercial toll free location-based calling services referenced above. I believe the Commission's continuing efforts in this area may continue to foster benefit to wireless usage beyond 911 systems. For example, earlier this year, the Commission issued a Notice of Inquiry on location-based routing for 911 calls, seeking industry and public input on reducing delays in and improving such functionality.

3. How should we ensure that we do not use universal service funding to overbuild an existing broadband provider when that existing provider serves, or has plans to serve, a significant number of, but not all, locations in a census block?

Response: The Commission is continuing to refine its universal service programs to more precisely target support. For example, participants in the Connect America Fund must report the precise geolocation of the locations they build out using federal funding. This below-census-block granularity will enable the Commission to more closely track compliance with our rules and ensure that overbuilding even within a census block does not occur.

4. How should we ensure that universal service funding is not used by a recipient to enter an adjacent area that is already served?

Response: Recipients of Connect America Fund support are prohibited from using that support anywhere outside of their eligible areas. In addition, recipients must submit the precise geolocation of the locations served using such funding to USAC for review and potential auditing.

a. Would you consider an audit of current universal service spending to review this issue?

Response: USAC regularly reviews the submissions of carriers and conducts risk-based audits to ensure program compliance.

The Honorable Frank Pallone, Jr.

1. I'm concerned that the only time Democratic Members seem to get responses from you or the FCC to our oversight letters is either when we send public follow-up letters, or shortly before you're scheduled to testify before the Committee. Moreover, your responses often are incomplete and, further, the answers you do provide are so general and lacking in specificity that they do not truly satisfy the questions raised. This is particularly troubling given your commitment to Ranking Member Doyle and me at the beginning of this Congress to be responsive to both Democrats and Republicans.

   a. Going forward, will you commit to providing complete responses to both Republican and Democratic Members of this Committee within three weeks of receiving such inquiries?

      Response: I am happy to renew my commitment to respond to all congressional inquiries in a complete and timely manner. I have done so throughout my tenure. For example, when you wrote earlier this year asking about 26 letters written by Democratic members of the Committee, we had already responded to 21 of those letters—and I responded to the remaining five shortly thereafter. And as you know, each response requires an examination of different facts and circumstances that may require a substantial devotion of limited Commission resources.

      Under my leadership, the Commission has been more transparent than ever before. I have responded to 389 letters over the last twenty months. And for the first time, we have released the full texts of meeting items three weeks in advance, thus providing Congress and the American people the ability to see what the FCC is considering before the Commission votes. This level of transparency at the Commission is unprecedented, and I look forward to working with you to maintain this transparency in the months and years ahead.

   b. To the extent you need additional time on some aspect of an inquiry, will you commit to submitting a written response within three weeks of receiving such request explaining what information you cannot provide at that time, what steps are being taken to provide a complete response to the inquiry, and by when the complete response will be sent?

      Response: As I explain in the response to the question above, each letter I receive contains a unique set of facts and receives the singular attention that it deserves. Nonetheless I am happy to reiterate my commitment to respond to all congressional inquiries in a complete and timely manner.

The Honorable Yvette Clarke

1. Following FCC Auction 97 for AWS-3, which raised more than $44 billion in auction proceeds, some committee Democrats, including myself, sent your agency a letter in June 2015, asking you to curb instances of "gaming" of the Designated Entity (DE) program. In our letter, we'd also offered some recommendations to make smart reforms to the FCC's designated entity and other small business-related rules and policies. Our letter was prompted largely by public disclosures that DISH Network had heavily financed and could potentially exert unauthorized control over these DEs and licenses.

   I understand though, that in late August 2017, the DC Circuit remanded the FCC's decision to deny bidding credits to some of the winning DEs back to your agency. The DC Circuit agreed with the DE petitioners that in the past, the FCC had allowed small companies a chance to modify their contractual agreements with large investors to gain enough independence from those investors to satisfy the FCC.

   Judge Pillard, who wrote that case opinion stated, "the FCC's [rules and decisions] did not give [the Petitioners] clear notice" of which violations of its control rules were irreparable. (Op. at 45). Judge Pillard wrote further, "Where, as here, hundreds of millions of dollars are at stake, regulated parties need fair notice of the circumstances in which a finding of de facto control will and will not be subject to an opportunity to attempt to negotiate a cure." (Op. at 45) The Circuit Court concluded "that an opportunity for [the] petitioner to renegotiate their agreements with DISH provides the appropriate remedy." (Op. at 46).

   The appeal holds very important implications for the future inclusion of designated entities and small businesses who wish to participate in spectrum auctions. Invariably, these bidders will need to seek out capital and execute financing and operations agreements that pass Commission muster. Without more clear guidance from the Commission, consistent with the DC Circuit's remand, it is highly probable that designated entities and small businesses will continue to be shut out from the wireless marketplace.

   a. What is the status of the remand and when will the FCC act consistently with the DC Circuit opinion?

      Response: In January 2018, the Wireless Telecommunications Bureau issued the *Order on Remand* (DA 18-70), which put in place a process to afford Northstar and SNR Wireless an opportunity to cure consistent with the D.C. Circuit opinion. On July 12, 2018, the Commission affirmed that order with one minor modification (FCC 18-98). This process remains ongoing.

   b. Have the petitioners in that appeal attempted to renegotiate with DISH Network and submitted those renegotiated terms to the FCC?

      Response: Northstar and SNR Wireless have renegotiated their agreements with DISH and submitted the new agreements to the FCC on June 8, 2018.

   c. Provided that a satisfactory cure with respect to the petitioners is achievable, how will the Commission resolve the matters of the disputed Auction 97 licenses and the denied bidding credits?

Response: The *Order on Remand* established a process for petitioners and parties of record to provide input to the Commission on these issues. That process contemplates the possibility of additional filings by Northstar and SNR Wireless, currently due on September 6, 2018, with an opportunity by other parties of record to file responsive comments 30 days thereafter. Commission staff will evaluate the record established through this process and, once it is complete, make recommendations to the Commission about how to proceed.

2. It has come to my attention that the Commission recently notified at least two 600 MHZ auction winners of *de facto* control concerns and afforded them an opportunity to cure.

   a. Please identify all DE bidders participating in the AWS-3 and 600 MHz auctions that were afforded opportunities to cure *de facto* control issues.

      Response: The Broadband Division has identified two DE bidders raising control issues (although not necessarily issues of *de facto* control)—Bluewater Wireless II, L.P. and Omega Wireless, LLC—and asked each to provide written explanations as to how specific provisions in their agreements were consistent with their eligibility for a small business bidding credit. In response, both applicants chose to revise their agreements.

   b. Do all DEs applying for FCC licenses and bidding credits have similar opportunities to cure potential *de facto* control issues consistent with the DC Circuit's ruling?

      Response: DEs who applied for Commission licenses and bidding credits before the D.C. Circuit's ruling will receive similar opportunities to cure control issues. For upcoming Auctions 101 and 102, however, the Commission informed applicants that they "should not expect to receive any opportunities to revise their ownership structure after the filing of their short- and long-form applications, including making revisions to their agreements or other arrangements with interest holders, lenders, or others in order to address potential concerns relating to compliance with the designated entity bidding credit requirements." *See* FCC 18-109.

   c. Do these opportunities to cure involve back-and-forth discussions or meetings between the FCC and the DEs?

      Response: Neither the court decision nor the Commission's rules and policies require the Commission to hold "responsive, back-and-forth discussions" with DEs, especially given the prohibitions applicable to a restricted proceeding. Instead, the Commission, like the court, expects that an opportunity to cure may require negotiations between DEs and those who have invested in them—negotiations common among business entities that have entered into contractual arrangements. The Commission's role is simply to determine whether a DE has complied with the rules laid out for bidding credits, not to essentially negotiate against itself by allowing variances with an established decision by the agency (here, the denial of bidding credits to certain entities) that has already been upheld by the court as reasonable.

   d. Please identify which DEs have received or been denied licenses and/or bidding credits and detail what specific steps that the Commission took on its own or pursuant to

delegated authority to notify these DEs about these issues or to guide them on how to cure those issues.

Response: To date, no 600 MHz applicants have been denied any licenses or bidding credits for which they applied. Attached is a list of the applicants that have been granted 600 MHz licenses as of the date of this letter; applicants that received Small Business or Rural Service Provider bidding credits are identified on this list.

With respect to communicating with 600 MHz DE applicants about their eligibility for bidding credits, the Broadband Division sent two letters, which are attached, asking Bluewater Wireless II, L.P. and Omega Wireless, LLC to provide written explanations as to how specific provisions in their agreements were consistent with their eligibility for a small business bidding credit. In response, both applicants chose to revise their agreements.

e. Will the Commission be taking any further actions under your Chairmanship to increase designated entity and small business ownership and participation through spectrum auctions in the communications and IT sectors?

Response: Pursuant to Section 309(j) of the Communications Act, the Commission regularly considers in the context of designing each of its spectrum auctions how to promote the dissemination of licenses among a wide variety of applicants, including but not limited to, through use of bidding credits. We are providing eligible small business and rural service providers the opportunity to seek bidding credits in upcoming Auctions 101 and 102, which should promote small business participation.

The Honorable Debbie Dingell

1. Given the Congressional and public attention questioning the FCC's reported DDoS attack, what did you do to verify whether the DDoS attack occurred and what steps did you take to address the alleged attack? Please provide all correspondence and other documentation between you and your staff that reflect your engagement on the issue.

   Response: The Office of Inspector General Report details some of the steps we took to verify the determination that David Bray, the then-CIO, made. For example, the Commission's Chief of Staff asked the then-CIO if he was confident that the incident wasn't caused by a number of individuals "attempting to comment at the same time . . . but rather some external folks deliberately trying to tie-up the server." In response to this direct inquiry, the former CIO told him: "Yes, we're 99.9% confident this was external folks deliberately trying to tie-up the server to prevent others from commenting and/or create a spectacle." Moreover, in the days and weeks following the incident, my office had several conversations with the then-CIO and other Commission IT personnel to better understand what had happened, help answer questions regarding what had happened, and take steps to keep ECFS running.

   In terms of addressing the situation, following the incident the Commission took several steps to ensure that ECFS remained operational. Career FCC IT personnel have explained to my office that they focused on three key areas with respect to ECFS: content delivery, system scaling, and application optimization.

   For content delivery, FCC IT personnel improved caching both internally, within the ECFS system, and externally, leveraging our Content Delivery Network provider. Caching improves content delivery to the end user while reducing the load on ECFS.

   With respect to system scaling, FCC IT personnel enhanced ECFS both vertically (using "larger" instances with more memory and CPU capacity) and horizontally (adding additional instances to the various clusters) to deal with the increased volume of requests. The scaling of the various components of ECFS was initially done manually but was later automated to the extent possible.

   Finally, FCC IT personnel also optimized the ECFS application both in terms of data access and application functions. The data queries were optimized as the dataset increased and better indexing strategies were implemented to improve retrieval from the data store—especially for queries producing large return sets. The application functions were tested and optimized to improve performance to the end user.

2. When did you personally suspect that there was no May 7th DDoS attack?

   Response: I initially assumed that the attack was not the result of a DDoS attack, but received a contrary opinion from the then-CIO (an opinion reinforced by IT staff on July 24, 2017 during a meeting my office). I personally suspected the then-CIO's opinion was wrong on January 23, 2018, when I learned that the Office of the Inspector General did not believe the then-CIO's representations were accurate. That suspicion was, as you know, confirmed in the OIG's report.

3. During the most recent FCC oversight hearing on July 25, 2018, when asked about providing the Committee with reports, requests, memoranda, and service logs related to the DDoS attack, you referenced the OIG and said you "would expect him to issue more information on this in the very near future."

   a. Were you aware of the findings of the IG's report at that time?

      Response: Yes.

   b. Prior to the OIG's report being released, were you ever advised by either the FCC's General Counsel or the OIG to not correct the public record and your misrepresentations to Congress that there had not been a cyber-attack during the net neutrality comment period? If so, were those advisories in writing and will you commit to sharing those with the Committee?

      Response: The OIG orally requested that we not discuss the investigation with anyone until it was complete in order not to jeopardize it (including the referral of facts involving the then-CIO's conduct to the Department of Justice for potential criminal prosecution).

The Honorable Jerry McNerney

1. During the oversight hearing, I asked you about VPNFilter—Russian-linked malware that can be used to steal users' information, exploit devices, and block network traffic. I noted that dozens of router models have been identified as susceptible to VPNFilter, and yet many consumers know nothing about it. While some consumers might be aware of it, they have been left wondering if their router is affected and what steps they should take to protect themselves from potential threats. Since your responses to my questions regarding this matter were not clear, I wanted to give you another opportunity to answer them.

    a. What is the FCC doing to make sure ISPs inform customers about VPNFilter malware, how to update their routers, and whether their routers have been compromised? Please specify all actions the FCC has taken to date and any steps the FCC plans to take going forward.

    Response: When consumers file informal consumer complaints with the Commission about network and end user security concerns relating to a specific provider, we forward their concerns to the provider for investigation and response pursuant to our informal complaint process. We also refer consumers to the Federal Trade Commission, which has helpful information and resources regarding a variety of online security issues on its website. We are currently exploring additional avenues for consumer outreach and education.

    b. Is the FCC doing anything at all to help make consumers aware of how to protect themselves against their routers being infected by malware? Please specify all actions the FCC has taken to date since you became Chairman and any steps the FCC plans to take going forward.

    Response: Please see response to 1.a. above.

2. You recently announced that you will be making changes to the FCC's Electronic Comment Filing System (ECFS) in an effort to address fake comments. You have also noted that if your reprogramming request is approved by the House and Senate Appropriations Committees, the FCC will incorporate CAPTCHA or a similar mechanism to prevent bots from submitting comments.

    a. In addition to your plans to incorporate CAPTCHA or a similar mechanism, can you provide us with details about what else you plan to do to combat fake comments and the misuse of Americans' identities?

    Response: We intend to seek a broad range of input before making final decisions with respect to how ECFS will be redesigned, so I am not able to provide such details at this time.

    b. Are there any steps you can take now to prevent fake comments from being filed in matters currently pending before the Commission?

Response: The current system cannot validate the user identity, which is why we are focused on redesigning the ECFS system rather than modifying the existing system.

c. Following the reprogramming request's approval, how quickly can you get started?

Response: The Commission is moving forward with the procurement steps for this project and expects that the Discovery/Requirements phase of the ECFS Replacement project will start in the first quarter of FY 2019.

d. How long do you expect the process to take?

Response: Upon completion of the procurement steps and the Discovery/Requirements phase of the ECFS Replacement project, we will have a more accurate timeline for ECFS development. The estimated development time is six to nine months.

e. Will you commit to giving me and the quarterly briefings on the FCC's actions to address fake comments, prevent identity theft, and restore the public's trust in the ECFS?

Response: The Commission will commit to providing quarterly briefings on ECFS development to Congress.

3. RAY BAUM's Act of 2018, which was signed into law as part of the Consolidated Appropriations Act of 2018, included my bill, the Improving Broadband Access for Veterans Act. Pursuant to this law, the FCC is required to produce a report examining the current state of veterans' access to broadband and what can be done to increase access, with a focus on low-income veterans and veterans residing in rural areas. In preparing this report, the FCC is to provide the public with notice and an opportunity to comment. The report must be completed by March 23, 2019 and include findings and recommendations for Congress.

Veterans, who fight tirelessly to protect our country, face many challenges when they return home. Not having internet access makes what is already an incredibly difficult transition process to civilian life even harder. It is critical that we move quickly to close the digital divide for veterans.

a. Has the Commission started the process for producing this report?

Response: Yes. Commission staff are in the process of preparing the Public Notice for this report.

In the meantime, the FCC is working to promote broadband-enabled access and services to veterans. For example, I have delegated to Commissioner Carr the responsibility of spearheading a pilot program for telehealth connectivity, with a focus on increasing access for low-income families and veterans. In addition, I have personally visited three facilities run by the U.S. Department of Veterans Affairs (VA)—in Lecanto, Florida; Boise, Idaho; and Salt Lake City, Utah—to better understand how broadband can improve veterans' health through services like online mental health consultations. I have also spoken repeatedly to VA leadership about collaborating to broaden the availability of telemedicine services to those who have served in our armed forces.

b. On what date do you expect that the Commission will begin to seek public comment for this report?

Response: We plan to release the Public Notice in the fall.

c. Will you commit that by November 1, 2018, you will provide my office with a briefing on the status of the report?

Response: Yes. The Commission's Office of Legislative Affairs will coordinate with your staff to schedule a briefing on the status of the report.

FEDERAL COMMUNICATIONS COMMISSION
Wireless Telecommunications Bureau
Broadband Division
445 12th Street, S.W., Suite 3-C123
Washington, D.C. 20554

May 21, 2018

Thomas Gutierrez
Lukas, LaFuria, Gutierrez & Sachs, LLP
8300 Greensboro Drive, Suite 1200
Tysons, VA 22102

Re: Bluewater Wireless II, L.P.
Application for 600 MHz Licenses/Auction 1002
File No. 0007754927

Dear Mr. Gutierrez:

The Broadband Division (Division) of the Wireless Telecommunications Bureau (WTB) is processing the application of Bluewater Wireless II, L.P. (hereinafter "Applicant") for sixty-six 600 MHz Band licenses pursuant to its winning bids in Auction 1002[1] under FCC File No. 0007754927 (Application).[2] In its Application, Applicant seeks a 25% Small Business Designated Entity (SB DE) bidding credit in the amount of $150,000,000.[3]

To establish its eligibility for the SB DE bidding credit, Applicant asserts that Charles C. Townsend, the sole owner and president of the Applicant's General Partner (GP), Bluewater Wireless Management Company, has both *de jure* and *de facto* control of the Applicant.[4] With reference to the reviewed Bluewater Wireless, II, L.P. Agreement of Limited Partnership, dated December 1, 2015 (Agreement), filed with the Application, please provide by June 20, 2018 a written explanation as to how the specific provisions of that Agreement identified in Appendix A, both individually and in the aggregate, are consistent with this assertion. If your explanation leads Applicant to revise the Agreement, please include a redline of any changes when you file your explanation. All responses to this letter should be filed as part of the Application in ULS. In addition, please also send a courtesy copy of your filing addressed to Madelaine Maior at madelaine.maior@fcc.gov.

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[1] *Incentive Auction Closing and Channel Reassignment Public Notice: The Broadcast Television Incentive Auction Closes; Reverse Auction and Forward Auction Results Announced; Final Television Band Channel Assignments Announced; Post-Auction Deadlines Announced*, Public Notice, 32 FCC Rcd 2786 (2017) (*Auction 1002 Closing Public Notice*).

[2] Bluewater Wireless II, L.P. Long-Form Application, FCC Form 601, ULS File No. 0007754927 (filed Apr. 25, 2017, last amended July 25, 2017) (Application); Bluewater Wireless II, L.P., FCC Ownership Disclosure Information for the Wireless Telecommunications Services, FCC Form 602, File No. 0007859165 (filed July 19, 2017).

[3] *Auction 1002 Closing Public Notice*, 32 FCC Rcd at 2875, Appx. B.

[4] *See* Application, Exhibit C – Small Business Bidding Credit.

Sincerely,

Blaise A. Scinto / jbb

Blaise A. Scinto
Chief, Broadband Division
Wireless Telecommunications Bureau

Attachment: Appendix A

APPENDIX A

1. The Agreement authorizes the GP to "manage the Partnership business . . . [and] perform all contracts and undertakings deem[ed] necessary or advisable or incidental to . . . the Partnership," but only insofar as "all such acts and undertakings are contemplated by the Reviewed Budget" as submitted to the Advisory Board.[1]

2. The LPs and the Advisory Board must approve the following actions taken by the GP on behalf of the Partnership even if contemplated in a Reviewed Budget. For example:

   (a) The GP's ability "to borrow money . . . in furtherance of any and all purposes of the Partnership,"[2] must be both contemplated in the Reviewed Budget[3] *and* approved by the Advisory Board.[4]

   (b) The Applicant may acquire and/or dispose of certain property only if such transactions are contemplated in the Reviewed Budget[5] *and* the Advisory Board and the partners approve the transaction.[6]

   (c) The GP may hire staff on behalf of the Partnership only if staff salaries and benefits are contemplated within the Reviewed Budget,[7] *and* the Advisory Board approves of "the annual compensation and benefits for senior management of the Partnership."[8]

   (d) The GP-prepared budget is subject to Advisory Board approval if "aggregate expenditures proposed in the Reviewed Budget exceed by more than 20% the aggregate expenditures included in the immediately preceding Reviewed Budget."[9] Given the limited scope of the

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[1] Bluewater Wireless II, L.P. Long-Form Application, FCC Form 601, ULS File No. 0007754927 (filed Apr. 25, 2017, last amended July 25, 2017), REDACTED Exhibit D –Agreement of Limited Partnership (Agreement) §§ 3.01(a), (e). *See also* Agreement § 3.05(a)(i) ("Reviewed Budget"). It is unclear how the Reviewed Budget relates to the initial budget, and how the initial budget is prepared, reviewed, and approved. Please address these questions in your response.

[2] Agreement § 3.01(e)(ii).

[3] Agreement § 3.01(e).

[4] Agreement § 3.04(c)(i)(d).

[5] Agreement § 3.01(e)(i). We note that sections of the Agreement use the terms "asset" and "property" interchangeably, and neither term is defined in the Agreement.

[6] Agreement §§ 3.04(c)(i)(f)(Advisory Board must approve "material asset transfers and acquisitions"), 3.06(c) (Advisory Board approval required to "sell…a material portion, all or substantially all of the Partnership's assets), 4.01(a)(i) (requiring the "Consent of the Partners" for "[t]he sale, transfer, lease or other conveyance of all or substantially all of the Partnership's property"). We note the term "material" is used to describe both a type of asset and a portion of the Partnership's assets but is not defined in the Agreement. Further, the Agreement is unclear about whether the Advisory Board or the Partners must first approve a transaction disposing of all or substantially all of the Partnership's assets. Please address these questions in your response.

[7] Agreement § 3.05(a)(i).

[8] Agreement § 3.04(c)(i)(e). Notably, the Agreement provides that, after the Applicant no longer is subject to the Commission's Designated Entity rules, the Advisory Board must approve the annual budget and "any material amendments thereto." Agreement §§ 3.04(c)(i)(c), 3.05(b)(i).

[9] Agreement § 3.05(a)(ii).

initial budget,[10] and the likelihood that the business will progress beyond this initial stage, one or more subsequent budgets are likely to exceed the 20% limit that triggers the approval of the budget by the Advisory Board. Even though the Agreement provides that the 20% limit is "applicable only when the Partnership remains in the same phase of development of its business . . . as reasonably determined by the [GP],"[11] the Agreement does not define "phase of development" for purposes of determining when the GP must obtain Advisory Board approval of a budget.

3. The Advisory Board has the unilateral authority to remove and replace the GP or force the sale or other disposition of the Partnership's assets if the Advisory Board determines that "[GP president, Charles Townsend] fails to devote . . . such time as may be reasonably necessary for the proper performance of his duties and the General Partner's duties under this agreement."[12]

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[10] The Agreement states that the Partners agree that the initial budget consists only of a monthly [redacted] fee for the GP (capped at thirteen months) and an agreement to cover the GP's expenses subject to a cap of [redacted]. Agreement § 4.02(b).

[11] Agreement § 3.05(a)(ii).

[12] Agreement § 3.04(c)(ii). *See also* Agreement § 3.01(f). The Agreement does not appear to define what is "reasonably necessary" or to place any limits on the Advisory Board's determination of whether this standard is met. Please address these questions in your response.

FEDERAL COMMUNICATIONS COMMISSION
Wireless Telecommunications Bureau
Broadband Division
445 12th Street, S.W., Suite 3-C123
Washington, D.C. 20554

June 4, 2018

Tom W. Davidson
Akin, Gump, Strauss, Hauer & Field, LLP
1333 New Hampshire Avenue, N.W.
Washington, DC 20036

Re: Omega Wireless, LLC
Application for 600 MHz Licenses/Auction 1002
File No. 0007754732

Dear Mr. Davidson:

The Broadband Division (Division) of the Wireless Telecommunications Bureau (WTB) is processing the application of Omega Wireless, LLC (hereinafter "Applicant") for one-hundred and nineteen 600 MHz Band licenses pursuant to its winning bids in Auction 1002[1] under FCC File No. 0007754732 (Application).[2] In its Application, Applicant seeks a 25% Small Business Designated Entity (SB DE) bidding credit in the amount of $32,234,183.[3]

To establish its eligibility for the SB DE bidding credit, Applicant asserts that the Controlling Members of the LLC[4] and members of the LLC's Board of Managers[5] have both *de jure* and *de facto* control of the Applicant. With reference to the reviewed Omega Wireless, LLC Amended and Restated Limited Liability Company Agreement, dated April 6, 2016 (Agreement) filed with the Application, please provide by July 9, 2018 a written explanation as to how the specific provisions of that Agreement identified in Appendix A, both individually and in the aggregate, are consistent with this assertion. If your explanation leads the Applicant to revise the Agreement, please include a redline of any changes when you file your explanation. All responses to this letter should be filed as part of the Application. In addition, please also send a courtesy copy of your filing addressed to Madelaine Maior at madelaine.maior@fcc.gov.

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[1] *Incentive Auction Closing and Channel Reassignment Public Notice: The Broadcast Television Incentive Auction Closes; Reverse Auction and Forward Auction Results Announced; Final Television Band Channel Assignments Announced; Post-Auction Deadlines Announced*, Public Notice, 32 FCC Rcd 2786 (2017) (*Auction 1002 Closing Public Notice*).

[2] Omega Wireless, LLC Long-Form Application, FCC Form 601, ULS File No. 0007754732 (filed Apr. 27, 2017, last amended Jan. 17, 2018) (Application); Omega Wireless, LLC, FCC Ownership Disclosure Information for the Wireless Telecommunications Services, FCC Form 602, File No. 0008064598 (filed Jan. 17, 2018).

[3] *Auction 1002 Closing Public Notice*, 32 FCC Rcd at 2875, Appx. B.

[4] Kenneth D. Anderson, Christopher J. Jensen, Edward Moise, and W. Scott Soden are identified by Applicant as Controlling Members of the LLC. *See* Application, Exhibit C – Small Business Bidding Credit

[5] Kenneth D. Anderson, Christopher J. Jensen, Edward Moise, W. Scott Soden, Barry B. Lewis, and Craig W. Viehweg are identified by Applicant as members of the LLC's Board of Managers. *See* Application, Exhibit C – Small Business Bidding Credit.

Sincerely,

Blaise A. Scinto

Blaise A. Scinto
Chief, Broadband Division
Wireless Telecommunications Bureau

Attachment: Appendix A

APPENDIX A

1. The April 6, 2016 Omega Wireless, LLC Amended and Restated Limited Liability Company Agreement (Agreement) confers management responsibilities on the Board of Managers.[1] However, several Company activities require authorization by a "supermajority"[2] of all Managers, thereby necessitating, at a minimum, one of the two stated Non-Controlling Managers voting in favor of the proposed actions.[3] The activities subject to supermajority approval include:
   - the annual budget for expenditures;[4]
   - any "material deviation from the approved budget, the effect of which would have a substantial impact on the financial condition of the Company;"[5] and
   - incurring "any indebtedness or authorize, cause or allow any Subsidiary to incur any indebtedness in an amount that, when combined with all other indebtedness of the Company and the Subsidiaries, exceeds twenty five percent (25%) of the annual budgeted capital expenditures."[6]
2. The Agreement requires the consent of the Majority Institutional Investors[7] before the Company, the Board of Managers or other agents of the Company may engage in certain activities and/or transactions,[8] including:
   - any amendment of the Company's charter documents, including the Agreement, without limitation (other than as reasonably required by the FCC);[9] and
   - the sale, transfer or assignment of not only "all" but also "any portion" of the Company's assets or property[10]

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[1] Omega Wireless, LLC Long-Form Application, FCC Form 601, ULS File No. 0007754732, REDACTED Exhibit D – Amended and Restated Limited Liability Company Agreement § 6.1(a) (filed Apr. 27, 2017, revised Sept. 1, 2017) (Agreement) ("the powers of the Company . . . and business and affairs of the Company shall be managed under the direction, a Board of Managers . . . and . . . the Board may make all decisions and take all actions for the Company not otherwise provided for in this Agreement.").

[2] "Supermajority Vote" means the affirmative vote or written consent of four of the five Board votes, under most circumstances. Agreement § 1.1 ("Supermajority Vote").

[3] Agreement § 6.4(b). There are five members of the LLC's Board of Managers, two of whom are Non-Controlling Managers. *See* Agreement §§ 6.1(c) (naming Kenneth D. Anderson, W. Scott Soden, Christopher J. Jensen, Craig Viehweg, and Barry Lewis as the initial Managers of the Company); 6.1(g) (defining "Non-Controlling Manager", identifying Craig Viehweg and Barry Lewis as Non-Controlling Managers, and establishing the right of the Majority Institutional Investors to nominate Non-Controlling Managers).

[4] Agreement § 6.4(b)(ii).

[5] Agreement § 6.4(b)(iii).

[6] Agreement § 6.4(b)(iv).

[7] "Majority Institutional Investor" means "the Institutional Investors [comprised of M/C, Peppertree and Shamrock] whose Commitments as of the date of this Agreement amount to a majority of the Commitments made by all of the Institutional Investors as of the date of this Agreement" Agreement § 1.1.

[8] Agreement § 6.4(a).

[9] Agreement § 6.4(a)(iii).

[10] Agreement § 6.4(a)(vii).

Applicant	Bidding Credit
Agri-Valley Communications, Inc.	RSP 15%
Alaska Wireless Network, LLC	
AT&T Spectrum Holdings LLC	
Bluewater Wireless II, L.P.	SB 25%
Carolina West Wireless, LLC	RSP 15%
CC Wireless Investment, LLC	
Cellular South Licenses, LLC	
Chariton Valley Telephone Corporation	RSP 15%
CT Cube, L.P.	RSP 15%
Cumberland Cellular Partnership	RSP 15%
Docomo Pacific, Inc.	
East Kentucky Network, LLC	RSP 15%
Farmers Telephone Cooperative, Inc.	RSP 15%
Gold Spectrum, LLC	SB 15%
Hulce, James C	SB 25%
Inland Cellular LLC	RSP 15%
Iowa RSA 2 Limited Partnership	RSP 15%
Kentucky RSA 3 Cellular General Partnership	RSP 15%
Kentucky RSA 4 Cellular General Partnership	RSP 15%
LICT Wireless Broadband Company, LLC	
Mach FM Corp.	SB 25%
McCotter, James E	SB 25%
NE Colorado Cellular, Inc.	RSP 15%
NEIT Services, LLC	RSP 15%
Nex-Tech Wireless, LLC	RSP 15%
Northeast Nebraska Telephone Company	RSP 15%
Northern Valley Communications, LLC	SB 25%
Nova Wireless LLC	
Nsight Spectrum, LLC	
Omega Wireless, LLC	SB 25%
Pacific Comnex, Inc.	SB 25%
Panhandle Telecommunication Systems, Inc.	RSP 15%
ParkerB.com Wireless L.L.C.	
PBP LICENSE GROUP, LLC	RSP 15%
Pine Belt Cellular, Inc.	RSP 15%
Pine Cellular Phones, Inc.	RSP 15%
Pioneer Telephone Cooperative, Inc.	RSP 15%

Plateau Telecommunications, Incorporated	RSP 15%
Polar Communications Mutual Aid Corporation	RSP 15%
Rural Telephone Service Co., Inc.	RSP 15%
Sagebrush Cellular, Inc.	RSP 15%
SAL Spectrum, LLC	
SI Wireless, LLC	RSP 15%
Smith Bagley, Inc.	RSP 15%
Spectrum Financial Partners, LLC	SB 25%
Spotlight Media Corporation	SB 25%
T-Mobile License LLC	
Tradewinds Wireless Holdings, LLC	SB 25%
Triangle Communication System, Inc.	RSP 15%
TStar 600, LLC	SB 25%
UNITED STATES CELLULAR CORPORATION	
TOTAL	

Key:
SB 15% = granted a 15% small business bidding credit (revenue does not exceed $55 million)
SB 25% = granted a 25% small business bidding credit (revenue does not exceed $20 million)
RSP 15% = granted a 15% rural service provider bidding credit (subscribers fewer than 250,000)

Response to Written Questions Submitted by Hon. John Thune
Written Questions for the Record to Chairman Pai

Question 1. Please describe actions the FCC has taken to meet its statutory obligations in regards to the T-band.

Response: Following passage of the Middle Class Tax Relief and Job Creation Act in February 2012, the Commission froze the processing of applications for new or expanded T-Band operations to avoid adding to the cost and complexity of public safety relocation. It also waived the pre-Act regulatory deadline for migration of T-Band licensees to narrowband technologies, in light of the need for future relocation. In February 2013, the Commission released a Public Notice to gather information to develop a better understanding of options for the Commission's future consideration regarding the T-Band. In October 2014, the Commission opened up the 700 MHz narrowband reserve channels (twenty-four 12.5 kilohertz bandwidth channel pairs) for general licensing and afforded T-Band public safety licensees priority access to these channels in T-Band areas. In a 2015 *Notice of Proposed Rulemaking*, proposing addition of interstitial channels to the 800 MHz band, the Commission proposed affording public safety T-Band licensees priority access to the 800 MHz interstitial channels. Currently, Commission staff are developing options and recommendations for Commission consideration on addressing the statutory requirements for initiation of a T-Band auction and relocation of T-Band licensees.

Response to Written Questions Submitted by Hon. Roger Wicker
Written Questions for the Record to Chairman Pai

Question 1. Chairman Pai, I appreciate your efforts to close the digital divide. I also appreciate the FCC's efforts to protect the Lifeline program through reforms by removing bad actors, including those wireless resellers that have perpetrated fraud in the Lifeline program. Nonetheless, there are many wireless resellers not engaged in such misconduct that play an important role in providing Lifeline services to Tribal lands and in other parts of my state and nationwide. In light of the August 10th U.S. Court of Appeals for the D.C. Circuit's stay order, will you commit to conducting further analysis on the impact that a proposed wireless reseller ban in the Lifeline program would have on access to essential voice and broadband services for low-income consumers on Tribal lands, as well as in non-Tribal areas?

Response: Yes.

Question 2. Chairman Pai, what will you do to ensure that the FCC addresses the specific needs of federal government customers during the IP transition, particularly those with multisite locations in rural areas?

Response: Our goal is to close the digital divide and make sure that residential and business consumers in rural America have comparable service to those in urban America. That goes for federal government customers in rural areas as well. As NTIA recently wrote us, "in most instances, the transition from legacy to next-generation networks and services will be seamless for residential and business customers." We continue to work with our federal partners at NTIA to make sure we address the needs of all customers, including federal government customers.

Response to Written Questions Submitted by Hon. Roy Blunt
Written Questions for the Record to Chairman Pai

Question 1. The Commission has several issues in front of it regarding the TCPA—some remanded from the DC Circuit and some stemming from petitions filed with the agency. What is your timing on answering these questions and can you elaborate on your intent for future proceedings related to the TCPA?

Response: We are deliberating on the appropriate path forward in response to the March decision by the U.S. Court of Appeals for the District of Columbia in *ACA International v. FCC*, which struck down much of the agency's 2015 interpretation of the Telephone Consumer Protection Act (TCPA). I do not have a particular timeframe to report at this time, nor have I made a definitive judgment with respect to the issues raised by the court (e.g., the definition of autodialer). But I look forward to working with you and my colleagues on this matter.

In the meantime, we're continuing our crackdown on unwanted robocalls—what former Senator Fritz Hollings once rightfully deemed the "scourge of civilization." Unwanted robocalls are consumers' top complaint to the Commission, and we have accordingly made combating illegal robocalls our top consumer protection priority. We have aggressively enforced the TCPA as well as the Truth in Caller ID Act, leveling $120 million of fines and proposing more than $82 million in fines, respectively, against two robocallers who engaged in illegal spoofing on a massive scale. We have authorized carriers to stop certain robocalls at the source while we pursue the creation of a reassigned numbers database and a robust call-authentication framework. And we have been working with our colleagues at the Federal Trade Commission, hosting a policy forum in March and a tech expo in April.

This work will continue this fall. We are currently studying the record in response to our open rulemakings regarding a reassigned numbers database and additional opportunities for carriers to block illegal robocalls. In addition, we are closing loopholes in our rules that allow robocallers to profit through regulatory arbitrage (e.g., with toll-free calls), and we are working with carriers to implement a call-authentication framework by next year so that consumers can once again trust Caller ID.

Response to Written Questions Submitted by Hon. Deb Fischer
Written Questions for the Record to Chairman Pai

Question 1. On May 15, 2018, I sent you a letter with Senator Klobuchar and 61 Senators emphasizing long-term certainty needed for small, rural carriers receiving Universal Service Fund high-cost support. I appreciated the response you sent on August 6, 2018, reaffirming our concerns with regard to sufficient funding and consistency both for small carriers on the cost model, and those not on the model. In your response, you noted that the Commission is still in the process of reviewing the record on the pending Notice of Proposed Rulemaking (NPRM). The Commission's conclusions will have a significant impact on rural broadband deployment in rural Nebraska.

- Can you please provide further detail on when the Commission plans to take action on the NPRM?

- At this point in time, what are your recommendations for stabilizing much needed high-cost support going forward?

    - For legacy companies, what considerations would enable these companies to plan predictably so that they can service loans, implement periodic fiber network upgrades, and pay for annual repair and maintenance expenses?

    - For A-CAM model companies, is there an updated status on the issue of additional funding of up to $200 per location?

Response: I'm grateful for your advocacy on this issue and glad you agree that our reforms in March were a big win for rural communities that want high-speed Internet access and are served by rate-of-return carriers.

The NPRM seeks comment on ways to improve and simplify the funding system so that rate-of-return carriers have predictable support and the right incentives to efficiently invest in broadband connectivity in the rural areas they serve. We're also considering a second offer of model-based support to carriers, as well as how the legacy rate-of-return system might be improved. The public comment and reply period cycle for the NPRM closed on June 25, 2018. Like you, I believe it is a priority to ensure that small carriers can offer high-quality, affordable broadband to rural America. I look forward to working with my colleagues to put forward an order that would do just that before the year is over.

Response to Written Questions Submitted by Hon. Jerry Moran
Written Questions for the Record to Chairman Pai

Question 1. The MOBILE NOW Act, which was signed into law as part of the most recent omnibus package, called for the FCC and NTIA to identify 100 megahertz of new unlicensed spectrum while also requiring the creation of a "National Plan for Unlicensed Spectrum." What steps will the Commission take to free up much-needed unlicensed spectrum to support growing consumer demand for existing technologies and to provide innovation space for the technologies of the future? How are you coordinating with NTIA?

Response: The FCC has a routine consultation process with NTIA, especially through the Interdepartment Radio Advisory Committee (IRAC). We also have less formal staff contacts through various bureaus and offices, especially the Office of Engineering and Technology.

We plan to move forward on a rulemaking for the 6 GHz band this fall. Indeed, before passage of the RAY BAUM'S Act (FY2018 Consolidated Appropriations Act, Division P), we issued a July 14, 2017 Notice of Inquiry including that subject, resulting in a broad range of support for 6 GHz unlicensed use for Wi-Fi. I'm pleased that we're working in concert with NTIA and have a congressional mandate to proceed.

Question 2. This committee worked hard to ensure that adequate funding for the broadcast channel repack in the omnibus this past March, including money for impacted FM radio stations and Low Power TV and Translators. Next month, phase one of the repack moves begin. What process does the Commission have in place to ensure that, if a broadcaster being moved to a different channel is unable to meet their phased move deadline, through no fault of their own, that they will not be moved off of their current channel?

Response: There are options for stations to keep broadcasting even if there are circumstances beyond their control that prevent them from completing construction on their new channel at the end of their construction permit. Stations may be able to seek an extension of time to construct (though they will not be allowed to continue operating on their pre-auction channel more than 39 months after the repacking process started). Stations also could seek special temporary authority to operate on temporary facilities on their new channel or on another channel, if available. And the Commission of course has the ability to waive our rules when necessary and in the public interest. Commission staff are monitoring the transition through quarterly progress reports filed by the stations.

Question 3. I was successful in getting the FCC CIO Parity Act signed into law as part of the recent omnibus. This law requires the FCC to ensure that the agency's Chief Information Officer (CIO) has a significant role in the budgeting, programming, and hiring decisions of the agency, and given the CIO's subject matter expertise, prioritizing the replacement of costly and vulnerable legacy IT systems would be accounted for in this critical decision-making. Will you please describe the current role of the FCC's CIO in the agency's efforts to formulate an effective and targeted budget?

Response: I appreciate your ongoing and substantial commitment to ensuring that the Federal Government has robust and resilient Information Technology (IT) resources. It is essential that CIOs feel empowered to make critical decisions essential to upgrading and modernizing our IT systems. I'm pleased to note that our Acting CIO currently plays an important role in working with our Managing Director and my office to develop our budget and allocate resources.

Our top budget priority related to IT modernization is to end our reliance on outdated legacy systems by moving systems and applications to the cloud, a priority strongly supported by our Acting CIO. Such efforts not only improve the quality of our IT services, they also decrease expenses in the long run because it is quite expensive to keep many of our legacy systems running.

Consistent with this priority, in our Fiscal Year 2019 Budget Request, we have asked for $8,535,200 for IT modernization and implementation, including $4,619,000 for shifting systems to the cloud and $3,666,200 for shifting applications to the cloud. In fact, this request comprises the vast majority of the new spending contained in that budget request.

Moreover, it is important to note that we recently received and are grateful to you and your colleagues for approval for a reprogramming that would move de-obligated resources to current IT needs, improving our security and redesigning our Electronic Comment Filing System.

Question 4. As a Senator from rural Kansas, I always want to make sure that our broadband policies are moving towards connecting more rural Americans. Do you plan to take a balanced approach in the 3.5 gigahertz Citizens Broadband Radio Services (CBRS) proceeding, that ensures that both those who are connecting urban America and those who are connecting rural America are given fair opportunity to participate?

Response: Yes. We are reviewing the recommendations made by Commissioner O'Rielly, who I asked in 2017 to lead the FCC's review of our 3.5 GHz plans. I am actively engaged in the issue, having taken meetings just in the past several weeks with entities as varied as industrial Internet of Things representatives, fixed wireless providers, and others. Our goal is yours: to maximize the value of this band for American consumers and encourage broad participation.

Question 5. In May, the FCC approved an NPRM proposing to modernize part of the 2.5 GHz band, better known as Educational Broadband Service or EBS. EBS currently operates through a public-private partnership model among educators, commercial entities, and the public. In many places, for example, partnerships between EBS licensees and commercial lessees have led to low-cost internet service for schools, libraries, and anchor institutions. Additionally, some of these partnerships have supported the buildout of 4G and future 5G mobile networks, as well as fixed wireless systems that are closing the digital divide. As the FCC pursues this rulemaking, what is the agency considering and prioritizing related to existing lease agreements, service areas, levels of service, and current programs provided through these existing partnerships?

Response: This is an ongoing proceeding, the FCC (as you mention) having issued an NPRM on this topic earlier this year. The record is still open, and we have not made any definitive judgments on the way forward. Nonetheless, we have proposed to accommodate various interests involving this spectrum. For example, in paragraph 17 of the NPRM, we specifically sought comment "on whether we should first open up to three new local priority filing windows to give existing licensees, Tribal Nations and educational entities an opportunity to access 2.5 GHz spectrum to serve their local communities." Additionally, I personally met with representatives of Northern Michigan University last month in Michigan to learn how they are making innovative use of this spectrum to provide broadband access to very rural and remote towns in the state's Upper Peninsula.

Question 6. While EBS licenses have been issued in approximately half of the U.S., the FCC has not issued any new licenses since 1995, leaving much of the U.S. without a license. Some of these unlicensed areas are irregular-shaped gaps that currently exist between current license areas. In an effort to make certain this spectrum between licenses areas can quickly be put to use for mobile broadband, the FCC is considering automatic expansion of existing geographic service areas (GSAs) to the nearest county boundary in counties that service areas already intersect. Do you support this proposal? If not, please explain.

Response: This is indeed one of the proposals I made to my colleagues when we considered the NPRM and one which my colleagues unanimously adopted. The proceeding is still ongoing, as you know, and we are still receiving public feedback, so we have not made any definitive judgments on the appropriate way forward.

Question 7. In 2007, Kelsey Smith was abducted in broad daylight as she was getting into her car outside a department store in Overland Park, Kansas. While a search for her began immediately, law enforcement encountered difficulty in obtaining location information from her cell phone provider. After four days of searching, law enforcement located her body within 45 minutes of receiving her device location data.

Following Kelsey's murder, 23 states have enacted legislation in her name, the Kelsey Smith Act, which requires Commercial mobile service providers to provide call location information to law enforcement when the device has been used to call 9-1-1 for emergency assistance, or for a device that is in the possession of a user that law enforcement believes to be in an emergency situation involving risk of death or serious physical harm.

While current federal law doesn't prohibit telecommunications companies from providing location information to the police in true emergency situations that involve the risk of physical harm or death, it doesn't require them to do so either. Therefore, inconsistencies can arise in the way that firms respond to emergency requests from law enforcement officials for device location data and delay attempts to locate individuals in need of life-saving assistance. In testimony given before this committee on September 15, 2016, you stated that legislation, "can make a difference," and, "is already helping law enforcement save lives."

- Do you still believe that enacting the Kelsey Smith Act at the federal level will help law enforcement save lives by requiring telecommunications providers to provide call location information to law enforcement officials when responding to a call for

emergency service or in an emergency situation that involves the risk of death or serious physical harm?

- Do you believe the Kelsey Smith Act, as introduced by Senators Roberts, Moran, Fischer and Blunt on May 24, 2018, adequately safeguards civil liberties?

Response: I still believe that enacting the Kelsey Smith Act could help law enforcement save lives. And I will not forget meeting Kelsey's parents a few years ago in Kansas; hearing from Johnson County law enforcement officials about a small child who was recovered during a carjacking in part because of location information like this; and working with you, Congressman Yoder, and others on this issue. I would also note that the proposed legislation also contains several safeguards to protect civil liberties.

Response to Written Questions Submitted by Hon. Shelley Moore Capito
Written Questions for the Record to Chairman Pai

Question 1. In many rural communities, students have long commutes on school buses sometimes upwards of half an hour, an hour, or even longer one-way. Given the connectivity challenges many students face in rural communities, how could E-rate help connect school buses with wifi to allow students to use commute time to do homework, projects, or other school work?

Response: I agree with you on the value proposition of this approach. As just one example, I recently visited Moab, Utah, where I heard firsthand how Wi-Fi-enabled buses allow students in rural Utah schools to do their homework while they are traveling to and from athletic events.

My top priority is closing the digital divide, and that includes by leveraging existing programs such as the E-Rate program to ensure that low-income and rural students receive access to next-generation technologies and opportunities. Although the current E-Rate program does not support Wi-Fi on school buses, the idea is intriguing and worthy of further study—especially for those in rural communities where students generally have longer bus rides.

FCC Oversight Hearing
Senator Cantwell
Questions for the Record

Question 1. Your agency has been tasked with commencing a study of broadband deployment and access on tribal lands by March 2019. The agency has been criticized in the past for having less than robust compliance with the need for tribe consultation. Do you intend to consult with tribes in order to conduct this study?

Response: Yes

Question 2. If so, have you started the tribal consultations? If not, why not?

Response: We are presently in the planning phase for these Tribal consultations. We anticipate scheduling and conducting consultations as soon as we finalize the Tribal consultation plan.

Question 3. If you have started tribal consultations, which tribes and stakeholder groups have you consulted with or who do you intend to consult with?

Response: As stated in response to question 2, we are in the process of developing a Tribal consultation plan and anticipate that it will include reaching out to both individual Tribes and inter-Tribal organizations on a national and regional basis. This will likely include the National Congress of American Indians and regional associations such as the Affiliated Tribes of Northwest Indians, the United South and Eastern Tribes, the Midwest Alliance of Sovereign Tribes, and the Rocky Mountain Tribal Leaders Council. We also anticipate reaching out to Tribal telecommunications carriers and their association, the National Tribal Telecommunications Association, as well as individual Tribes.

Question 4. Your agency has been tasked with commencing a study of broadband deployment and access on tribal lands by March 2019. The agency has been criticized in the past for having less than robust compliance with the need for tribe consultation. How can we optimize the tribes' participation in the broadband study and the composition of the report?

Response: Previous experience suggests that we can optimize Tribal participation in the broadband study and composition of the report by engaging with a diverse range of Tribes and inter-Tribal organizations, and by doing so throughout the information-gathering and decisional stages of these efforts. We have also learned it is beneficial to offer Tribes the choice of both on- and off-the-record opportunities for discussion. These engagements can be made most productive by ensuring opportunities for participation by Tribal leaders or their formal designees, focusing discussion on a set of key topics and questions identified by Commission staff and based on currently-available broadband data coverage provided in advance to consultation participants.

Question 5. Will you commit to completing the next quadrennial review before leading the FCC in any process that changes any more of the existing media ownership rules?

Response: I can assure you that no further changes will be made to the rules covered by the quadrennial review mandate until the Commission completes another quadrennial review.

Question 6. Under your leadership the FCC has made many changes to media ownership rules over the past 18 months. Will you be looking at the impact of those changes in the upcoming quadrennial review?

Response: Congress requires the Commission to review the broadcast media ownership rules every four years to determine whether they continue to be necessary in the public interest. If the Commission determines any such rules not to be in the public interest, Congress has directed it to repeal or modify those rules. Typically, in quadrennial review proceedings, the Commission collects comment and data regarding the existing rules in order to meet this Congressional directive. I anticipate we will follow a similar course in the next quadrennial review, which is scheduled to begin before the end of the year.

Question 7. Do you think it's important that the upcoming quadrennial review reviews the changes that have been made to media ownership over the past 18 months and the impact that these changes have had on localism, media concentration and diversity?

Response: See response to Question 6 above.

Question 8. In 2016, the Court of Appeals chastised the FCC for making changes to media ownership rules without the benefit of having completed statutorily mandated reviews of the media marketplace and media ownership rules that were required in 2010 and 2014. Basically the court was saying that the FCC's policy making needed to be based on data and analysis. It's my understanding that the FCC needs to start its next data gathering review this year.

Given the court's guidance that any FCC changes to media ownership rules should be grounded in the type of up-to-date data and analysis required by the quadrennial review process, what you would recommend that the next Quadrennial review cover?

Response: See response to Question 6 above.

Question 9. When I asked you at the hearing if the FCC has the authority to address cybersecurity threats, you said that the FCC currently lacks the authority. In your view, which federal agency, if any, is the lead agency on cybersecurity issues, such as SS7, impacting wireless telephone networks?

Response: The Department of Homeland Security is the lead agency on cybersecurity issues.

Question 10. When I asked Chairman Pai at the hearing if the FCC has the authority to address cybersecurity threats, he said that the FCC currently lacks the authority. In your view, which federal agency, if any, is the lead agency on cybersecurity issues, such as SS7, impacting wireless telephone networks?

Response: The Department of Homeland Security is the lead agency on cybersecurity issues.

Question 11. The FCC has publicly encouraged wireless carriers to voluntarily address cybersecurity issues related to SS7 that impact their networks. Does the FCC currently have the

authority to require wireless carriers to address cybersecurity issues related to SS7? If not, please explain why.

Response: The Commission has not previously identified such authority, and I am not aware of any statutory provision that grants such authority. Notably, standing alone, Section 1 of the Act does not provide substantive regulatory authority to the Commission. *See*, *e.g.*, *Motion Picture Ass'n of America v. FCC*, 309 F.3d 796, 804 (D.C. Cir. 2002) (*MPAA*) (characterizing Section 1 as "very general" and rejecting notion that it afforded basis upon which agency could promulgate certain accessibility regulations); *American Library Ass'n v. FCC*, 406 F.3d 689, 691, 692 (D.C. Cir. 2005) (in rejecting FCC's so-called "broadcast flag" rule—in defense of which agency "cited no specific statutory provision giving the agency authority to regulate" but simply relied on Title I—extending *MPAA* and finding that "[t]here is no statutory foundation for the broadcast flag rules, and consequently the rules are ancillary to nothing").

Question 12. According to a recent article in the Washington Post, governments in other countries, including the United Kingdom, have "commissioned independent testing of the vulnerabilities in national cellular networks." Does the FCC currently have the authority to commission independent cybersecurity testing of U.S. wireless networks? If not, please explain why.

Response: We have not been appropriated funding, nor do we have the specific expertise in this area, to carry out such testing.

Question 13. Does the FCC currently have the authority to require mobile carriers to assess risks relating to the security of mobile network infrastructure as it impacts the Government's use of mobile devices? If not, please explain why.

Response: Although the Commission's authority to collect information is fairly broad, the Commission has not previously addressed this issue before. This does not prevent government agencies when contracting with mobile carriers to require an assessment of risks relating to the security of mobile network infrastructure as it impacts government use.

Question 14. Does the FCC currently have the authority to compel mobile carrier network owners/operators to provide information to the FCC to assess the security of the carriers' communications networks? If not, please explain why.

Response: Although the Commission's authority to collect information is fairly broad, the Commission has not previously addressed this issue before.

Question 15. A recent investigation by Senator Wyden revealed that wireless carriers were providing customer location to private companies without verifying that users had consented to this disclosure of private information. In response, all of the major wireless carriers announced they would stop selling location data via location aggregators.

Is subscriber location data, when created by wireless carriers through their cell towers or other network infrastructure, is Customer Proprietary Network Information (CPNI)? If not, please explain why.

Response: Yes. Section 222 of the Communications Act defines CPNI, in part, as "information that relates to the quantity, technical configuration, type, destination, *location*, and amount of use of a telecommunications service subscribed to by any customer of a telecommunications carrier, and that is made available to the carrier by the customer solely by virtue of the carrier-customer relationship." (emphasis added)

Question 16. Is location data is protected by 47 U.S.C. § 222, regardless of whether it is collected when the subscriber is making a call, browsing the web from their smartphone, or even when the subscriber's phone is not being used and is in the subscriber's pocket? If not, please explain why.

Response: Carriers retain their CPNI obligations regardless of whether a consumer is using their phone when data is collected or not.

Question 17. Prior to January 1, 2018, had the FCC ever audited a wireless carrier to determine whether or not it was verifying customer consent before sharing their location information with third parties?

a. If yes, please detail when these audits took place, what was their scope, and what did the FCC discover.

b. If not, please explain why.

Response: The Commission has not previously audited wireless carriers as described. However, the Commission constantly monitors complaints, public reporting, and carrier self-reporting of possible CPNI issues.

Question 18. Has the Commission responded to the Third Circuit mandate in the Prometheus Radio Project v. FCC line of cases to examine the impacts of broadcast consolidation on ownership opportunities for women and people of color?

Response: Yes. In its 2017 *Reconsideration Order*, the Commission analyzed whether there would be a material impact on minority and female ownership as a result of the policy decisions made therein. Additionally, in early August, the Commission majority also took definitive action to increase broadcast diversity by establishing the framework for an incubator program designed to help new entrants, including women and minorities, succeed in the broadcast industry.

Question 19. Does the Commission intend to collect any data so that it can examine how and whether broadcast consolidation relates to ownership diversity?

Response: The Commission collects data on broadcast ownership on a biennial basis. This includes comprehensive information on racial and ethnic minority and female broadcast ownership. Commission staff are currently working on the next report to summarize the data submitted earlier this year.

Question 20. What percentage of broadcast stations are owned by people of color? By women? Are you satisfied with those levels? If not, what kind of meaningful changes can the FCC make to expand ownership diversity?

Response: According to the Commission's 2017 Ownership Report that summarizes data from 2015, racial minorities owned 2.6% of full power TV stations, 5.8% of AM radio stations and 2.3% of FM radio stations. The same report showed that women owned 7.4% of full power TV stations, 8.9% of AM radio stations, and 8.1% of FM radio stations.

In order to promote greater diversity, in 2017 I re-established an Advisory Committee on Diversity that had been dormant for years before I became Chairman. And I specifically tasked this Advisory Committee with setting up a working group focusing on promoting broadcast diversity. Through its working group, the Committee is providing advice and recommendations to the Commission regarding how to empower disadvantaged communities and accelerate the entry of small businesses, including those owned by women and minorities, into the media, digital news and information, and audio and video programming industries. I also pushed to implement a new incubator program—something that had received a lot talk at the Commission for the last quarter century, but little action until the Commission majority finally established one in August. I hope that this program will help promote diversity of ownership and help address the significant barriers to enter the broadcast industry.

Question 21. What data, if any, did the Commission rely on to justify its recent assumptions that deregulation in the form of loosening local ownership protections would improve competition and localism in the broadcast market?

Response: The Commission must base its policy decisions on the data and information provided in the record. In the 2017 *Reconsideration Order*, the Commission found that the Eight-Voices Test included in the local television ownership rule was not supported by the record evidence and that there was no reasoned basis for retaining it. Further, the Commission found that the test denied the benefits of common ownership—particularly in smaller and mid-sized markets—without any evidence that it provided countervailing benefits to competition. The Commission also found that the Top-Four Prohibition contained in the Local TV Ownership Rule should be retained, but with a modification to allow for a case-by-case approach to address instances where the evidence proffered demonstrates that the Commission should not extend a blanket prohibition in a particular market or in a particular transaction.

Question 22. Does the FCC have any intention of soliciting public input with field hearings regarding whether or not local broadcast stations are serving the public interest to inform evaluations of recent media ownership changes or future ownership reviews?

Response: The Commission does not have any field hearings planned at this time.

Question 23. Notwithstanding any recent legislation, in your opinion, which part of the federal government should maintain responsibility for updating and maintaining the broadband map? What is the basis for your answer?

Response: The Commission has no strong view on who or what government entity should maintain and be responsible for updating the broadband map. The FCC does collect relevant data for such a map, and this data collection is critical for Universal Service Fund purposes.

Question 24. What is your view on whether the federal agency should use or rely on the data sets of private companies to fill out the broadband map?

Response: Federal agencies should use the best available data for the broadband map.

Question 25. What expertise does the FCC have with regard to data analytics and mapping?

Response: The FCC has more than 50 Ph.D. economists and statisticians that it relies on for the collection and analysis of data, along with a smaller number of data analysts. In addition, the Commission has roughly two dozen people who work with Geographic Information System (GIS) data, including several who specifically have a GIS background.

Question 26. What additional resources does the FCC need to effectively update and maintain the broadband map?

Response: The Commission has been able to update the fixed broadband map using existing resources and continues to work on updates with new information. Of course, additional resources would be helpful to update and improve the broadband map further, including the addition of mobile.

Question 27. On Friday, August 10, 2018, the U.S. Court of Appeals for the D.C. Circuit granted a stay of new FCC Tribal Lifeline rules that would have barred wireless resellers from providing Tribal Lifeline and would also limit the Tribal Lifeline program to rural Tribal areas. The Court found the FCC's decisions to be arbitrary and capricious. The FCC has proposed the same ban on resellers in its ongoing Lifeline proceeding. In so doing, the agency threatens to cut off service to more than 7 million of our most vulnerable citizens – veterans, seniors, single moms and others – who depend on the Lifeline program.

Does this decision put to rest any notion of limiting the important role of wireless resellers in the Lifeline program?

Response: The Commission has not reached any conclusion as to whether resellers should continue to be permitted to participate in the Lifeline program. We are reviewing the record in this open proceeding, including on this issue, because resellers have been the subject of the vast majority of Lifeline investigations for waste, fraud, and abuse. Furthermore, we are examining how the Lifeline program can support investment in broadband networks where they are needed most—in low-income urban communities, in rural areas, and on Tribal lands.

Question 28. Recently, wireline and wireless service providers recently asked the FCC for relief from the Lifeline program minimum service standards rules. These service providers claim that the FCC's minimum service standards—which increase each December—will force Lifeline subscribers into higher service levels and packages than they can afford. Can you tell me whether the agency plans to provide relief on this matter so that consumers are not hit with price increases in early December?

Response: The Wireline Competition Bureau released a Public Notice seeking comment on petitions concerning the Lifeline minimum service standards. The comment period closed on

September 14, 2018. We will take into consideration the issues raised and concerns expressed by all stakeholders as we work to resolve this proceeding.

Question 29. Broadband and bridging the digital divide is one of our top concerns in this subcommittee, and it is encouraging that this issue is a priority for the FCC. I know the FCC has taken a number of steps to advance the deployment of broadband and I am curious about your thoughts on TV white spaces technology and the opportunity it presents to serve rural areas. We've seen announcements about TV white spaces deployments in a variety of rural areas. It's my understanding that if the Commission were to finalize some of its open proceedings freeing-up sufficient spectrum and adopting appropriate technical rules, it would drastically help to reduce the upfront cost of building rural networks and any local provider would be able to provide unlicensed TV white spaces broadband connectivity.

What are your thoughts on this issue and would resolving these issues maximize an additional tool to address our rural broadband challenge? Would the FCC be able to resolve the critical technical and spectrum issues by the end of the year?

Response: From incorporating auctions into the Universal Service Fund's high-cost program and increasing support for telemedicine and telehealth applications to reducing regulatory barriers to investment and freeing up new spectrum resources, the Commission has made bringing digital opportunity to every American our top priority. I appreciate your recognition of the substantial work the Commission has done under my leadership to close the digital divide.

TV white spaces deployments may be another tool in the tool chest, and the Commission is currently weighing whether any targeted changes to our technical rules would facilitate such deployments. Complicating matters is that we are in the midst of repacking TV broadcasters as a result of the broadcast incentive auction, and so the Commission's top priority at this stage must be to ensure that the repacking process mandated by Congress in the Spectrum Act of 2012 is carried out appropriately and in a timely manner. Pursuant to the procedures adopted by the Incentive Auction Task Force and the Media Bureau in the Transition Scheduling Plan, the 10-phase transition deadlines include initiation of the Phase 1 testing period on September 14, 2018, with Phase 10 complete by July 3, 2020.

Question 30. Thank you continuing to advocate for the millions of rural Americans on the wrong side of the digital divide. As you know, many members of this committee share your concerns, and we want to do everything we can to expand coverage. However, as you know, it is important to have reliable mapping and data tools in order to do so. What can the Commission and members of this committee do to improve your data collection and broadband mapping in order to ensure we know exactly where coverage gaps remain?

Response: The Commission has been able to update the broadband map using existing resources and continues to work on updates with new information. Of course, additional resources would be helpful to update and improve the broadband map further. In the meantime, the Commission has an open proceeding on how to improve our corresponding data collection, and staff is reviewing ways to improve that data collection.

Question 31. With respect to Fixed Broadband Deployments, the Form 477 instructions provide that ". . . fixed broadband connections are available in a census block if the provider does or could, within a service interval that is typical for that type of connection—that is without an extraordinary commitment of resources—provision two-way data transmission to and from the internet . ." Is it possible for the Commission to segregate the data it collects on consumers who are served with broadband from the data it collects on consumers who could be served with broadband? Will that provide a better picture of which Americans have broadband connectivity?

Response: I agree that we must improve the Form 477 data collection devised by the last Administration. That's why the Commission, under my leadership, commenced a rulemaking last year to review Form 477 and consider ways to improve the quality, accuracy, and usefulness of the deployment data it collects. We seek comment on collecting data more granularly, such as you describe.

FCC Oversight Hearing
Senator Schatz
Questions for the Record

Phantom DDoS Attack

1. What specific steps, if any, did the FCC take to prepare when it was informed in advance by a producer from the John Oliver show that they planned to run a new episode on net neutrality on May 7, 2017? If it did not take any steps, why not?

   Response: While members of my staff believed that the Chief Information Officer had been informed of the upcoming show, the Office of Inspector General did not find any evidence that this notification occurred. In any event, prior to the 2017 Restoring Internet Freedom proceeding, the FCC IT team made performance improvements to ECFS to ensure it could handle the same volume as was experienced with the 2014 proceeding, and the Electronic Comment Filing System had been functioning well during the 2017 proceeding up to that point. The Electronic Comment Filing System was available over 99% of the time during the 2017 proceeding.

2. At the hearing you stated that you relied on assurances given by your staff on July 24, 2017, that the May 7, 2017, incident was a DDoS attack and not merely the result of excessive traffic from the John Oliver show. What questions did you ask those individuals at that time that gave you confidence in their assurances? What facts and documentation did they present to you that was so convincing? What steps did you take at that time to ensure that criminal law enforcement authorities had been properly engaged to investigate what you apparently had been assured was an unprecedented criminal act? What steps did you take once you became aware that you had been misled about the nature of the May 7th event, including disciplinary action against the individuals who provided you with false information and those who supervised them?

   Response: When my office was informed that we had been misled about the nature of the May 7 event, we specifically asked the Office of Inspector General whether we could discuss this matter with our IT staff and take disciplinary action if warranted. OIG asked us to refrain from taking these steps in order not to jeopardize its investigation. After the conclusion of the investigation, my office has discussed the matters contained in the report with relevant IT staff. At this point, however, I don't believe that it would be appropriate to discuss whether we are or will be taking any disciplinary action against specific staffers. I would note, however, that the Office of the Inspector General's report makes clear that the Commission's then-CIO was primarily responsible for providing my office with inaccurate information, and he is no longer with the Commission so we are not able to discipline him. Additionally, and as I observed in my statement of August 6, 2018, it has become clear that in addition to a flawed comment system, we inherited from the prior Administration a culture in which many members of the Commission's career IT staff were hesitant to express disagreement with the Commission's former CIO in front of FCC management.

Following the incident, the Commission's Chief of Staff asked the then-CIO about contacting federal law enforcement. Subsequently, my office was informed that the FBI had told our IT staff that the incident did not appear to rise to the level of a major incident that would trigger FBI involvement. However, as indicated in the Office of Inspector General's report, that information does not appear to have been accurate.

My office had several discussions with the then-CIO and other IT staff so that we could understand what had happened. During these discussions, members of my office asked many questions about how the ECFS operated and why the then-CIO was confident that problems with the system had not been caused by individuals attempting to file comments with the Commission. The answers we were provided appeared to make sense, but unfortunately many were based on inaccurate information. In terms of the July 24, 2017, meeting that you reference, I don't recall the specific questions I asked but I do remember being told that the incident was not caused by individuals attempting to file comments with the Commission but rather bots. I believe I was told that this conclusion was based, in part, on the amount of traffic at issue as well as the characteristics of that traffic.

3. At the hearing you testified as follows: "On January 23 of 2018, I was informed by my Chief of Staff, who'd been informed by the Office of the Inspector General, that they had suspicions that the former Chief Information Officer's statements to us and to Congress were inaccurate. The OIG then requested, because they had referred this matter for potential criminal prosecution to the Department of Justice, do not say anything to anyone." Did the OIG direct you not to inform Sen. Wyden and me that you had provided an incorrect and misleading account of the events of May 7, 2017, to us in your letter response dated June 15, 2017? Did you ask the IG if it would be permissible to inform us? Did you consult with the FCC General Counsel about the appropriate course of action in this regard and what was his advice? Why didn't you inform us as soon as you learned that the USAO-DC declined prosecution on June 7, 2018?

   Response: The Office of the Inspector General made a blanket request of us not to discuss its investigation with anyone during its pendency. We acceded to that request, even though we knew that we would be criticized for doing so, because we thought that it was important not to interfere with or jeopardize the investigation.

4. What specific upgrades and modifications did the FCC make to the ECFS system after the 2014 John Oliver incident and prior to the 2017 incident to improve the integrity and stability of the system?

   Response: The FCC's IT team has advised me that a new cloud-based ECFS (version 3.0) was built and delivered. ECFS 3.0 was built using node.js and with an ElasticSearch data store. The entire system is operating in the cloud with no dependencies on FCC's infrastructure. Prior to the 2017 proceeding, the FCC IT team made performance improvements to ECFS 3.0 to ensure it could handle the same volume as experienced with the 2014 proceeding. Improvements included optimizing the individual pages, reducing the page sizes, and improving load time.

Unlicensed Spectrum

How is the FCC working to identify and make available sufficient unlicensed spectrum to keep up with demand and to comply with the RAY BAUM'S Act of 2018? Be specific.

Response: Last year, we issued a Notice of Inquiry on mid-band spectrum, resulting in a broad range of support for unlicensed use in the 6 GHz band. In the RAY BAUM'S Act of 2018, Congress recognized the importance of this and other bands, and we appreciate the legislative support for our work in the statute. This fall, we plan to issue a Notice of Proposed Rulemaking to continue our work on the 6 GHz band. That's why I plan for the Commission to move forward on a rulemaking for the 6 GHz band this fall.

FCC Oversight Hearing
Senator Markey
Questions for the Record

The Commission is currently considering a forbearance petition to limit protections ensuring incumbent Local Exchange Carriers provide competing telecommunications carriers access to their networks at reasonable rates, terms, and conditions if there is not sufficient competition in the market. Will the Commission take into consideration the special circumstances of how Hurricane Maria devastated the local telecommunications infrastructure as it considers this proposal?

Response: Yes.

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

"Oversight of the Federal Communications Commissions"

Senator Udall Questions for the Record

Question 1: Chairman Pai - There is a recurring theme with the FCC, both with the changes to the Lifeline program and the FCC's recent order about National Historical Preservation Act consultation. The FCC says that it consulted with Indian Tribes while the tribes themselves disagree. What is your definition of meaningful tribal consultation?

Response: The Commission consults extensively with Indian Tribes in accord with our Tribal Policy Statement. For example, in 2017, the Commission tasked its Office of Native Affairs and Policy with developing and implementing a targeted Tribal consultation plan involving Commission senior staff in outreach efforts with a variety of Tribes across the country in connection with the Commission's Wireless Infrastructure Initiative. As a result of this plan, the Commission conducted extensive consultation and engagement in Indian Country to focus most particularly on wireless infrastructure deployment but also more generally on broadband deployment on Tribal lands as well as strategies for achieving that deployment, such as use of USF support. Commissioners and FCC staff visited at least nine different states, including Arizona, California, Connecticut, New Mexico, North Carolina, Oregon, South Dakota, Virginia and Wisconsin, in addition to holding consultations at FCC headquarters and numerous, widely attended conference calls. I personally participated in some of these consultations, from the Navajo Nation to the Rosebud Sioux Reservation to individual consultations at the National Conference of American Indians' Winter Session in Connecticut. For example, these targeted consultation and outreach efforts just through the summer of 2017 (from the *Second Report and Order*) include:

"Additional outreach efforts began immediately upon the NPRM's release with a May 25, 2017 conference call during which Commission staff walked through questions asked in the item and took questions and comments from 52 representatives of Tribal governments and Tribal cultural preservation offices, as well as three intertribal organizations. . . .

"The Commission facilitated consultations between the Chairman and Tribal representatives on the Rosebud Sioux Reservation in South Dakota on June 8, 2017. Twenty-nine Tribal representatives from the Lower Brule Sioux Tribe, Chippewa Cree Tribe, Fort Belknap Indian Community, Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, Eastern Shawnee Tribe of Oklahoma, Kaw Nation, Cheyenne River Sioux Tribe, and Rosebud Sioux Tribe, as well as a participant representing several Oklahoma Tribes, attended. . . .

"At the NCAI Mid-Year Conference on June 14, 2017, Chairman Pai participated in oneon-one consultations with the Gila River Indian Community, the Jamestown S'Klallam Tribe, multiple Oklahoma Tribal representatives including the Cherokee and Choctaw Nations, the Organized Village of Kake, the Chippewa Cree Tribe, the Pueblo of Isleta, the Sault Ste Marie Tribe of Chippewa Indians, . . . the Ohkay Owingeh Pueblo, and the Tanana Chiefs. Chairman Pai also delivered plenary remarks and consulted with representatives of NCAI, USET, and the NATHPO. Commission staff also held a listening session and briefed both the

Telecommunications and Technology Subcommittee and the Human, Religious, and Cultural Concerns Committee. . . .

"A member of the Chairman's staff, together with WTB and ONAP staff, consulted with representatives of the Confederated Tribes of the Grand Ronde Community of Oregon, Cow Creek Band of Umpqua Indians, Nez Perce Tribe, and Chippewa Cree Tribe on July 20, 2017, in Eugene, Oregon. . . .

"A similar FCC group subsequently conducted meetings in Broken Arrow, Oklahoma, on July 24, 2017. This visit included one-on-one meetings with the Muscogee (Creek) Nation, Navajo Nation, and Delaware Nation that discussed fees, information needs, and changes in technology. FCC staff also consulted with representatives from the Absentee-Shawnee Tribe of Indians of Oklahoma, Cherokee Nation, Cheyenne-Arapaho Tribes of Oklahoma, Chickasaw Nation, Delaware Nation, Eastern Shawnee Tribe of Oklahoma, Iowa Tribe of Oklahoma, Kaw Nation, Kialegee Tribal Town, Kiowa Indian Tribe, Muscogee (Creek) Nation, Navajo Nation, Osage Nation, Otoe-Missouria Tribe of Indians, Ponca Tribe of Indians of Oklahoma, Quapaw Tribe of Oklahoma, Seminole Nation of Oklahoma, Thlopthlocco Tribal Town, and United Keetoowah Band of Cherokee Indians in Oklahoma . . . .

"WTB and ONAP staff held a two-day dialogue session following the NATHPO annual conference on August 10-11, 2017, in Pala, California. Participants included representatives from NATHPO and over 70 representatives of approximately 50 different Tribal Nations, including the Absentee-Shawnee Tribe of Indians of Oklahoma; Pueblo of Acoma, Agua Caliente Band Of Cahuilla Indians, Bad River Band Of Lake Superior Tribe Of Chippewa Indians, Blackfeet Nation, Bridgeport Colony, Cahuilla Band Of Indians, Cherokee Nation, Comanche Nation, Cow Creek Band of Umpqua Indians, Dry Creek Band of Pomo, Eastern Shawnee Tribe Of Oklahoma, Forest County Potawatomi Community, Fort Belknap Indian Community, Gila River Indian Community, Ho-Chunk Nation Of Wisconsin, Hualapai Tribe, Jamul Indian Village, Jena Band of Choctaw Indians, Lac Du Flambeau Band Of Lake Superior Chippewa Indian,; Mescalero Apache Tribe, Miami Tribe of Oklahoma, Mohegan Indian Tribe; Muscogee (Creek) Nation, Navajo Nation, Oglala Sioux Tribe, Organized Village Of Kake, Osage Nation, Otoe-Missouria Tribe of Indians, Pala Band of Mission Indians, Pauma/Yuima Band of Mission Indians, Pechanga Band Of Luiseno Indians, Quapaw Tribe of Oklahoma, Reno Sparks Indian Colony Sac and Fox Nation in Oklahoma, Salt River Pima-Maricopa Indian Community, Santa Ynez Band of Chumash Indians, Sauk-Suiattle Indian Tribe, Shawnee Tribe, Shoshone-Bannock Tribe; Sisseton-Wahpeton Oyate of the Lake Traverse Reservation, Soboba Band Of Luiseno Indians, Sokaogon Chippewa Community, Susanville Indian Rancheria, Table Mountain Rancheria, Tejon Indian Tribe, Timbisha Shoshone Tribe, Tohono O'odham Nation, Tule River Reservation, Twenty-Nine Palms Band of Mission Indians, Upper Sioux Community of Minnesota, Ute Mountain Ute Tribe, White Mountain Apache Tribe, and Wichita & Affiliated Tribes. . . .

"Chairman Pai, supported by ONAP and WTB staff, traveled to the Navajo Reservation on August 22, 2017, to consult with representatives from an estimated 18 Tribal Nations, including the AkChin Indian Community, Blue Lake Rancheria, Delaware Tribe of Indians, Gila River Indian Community (Gila River Telecommunications, Inc.), Havasupai Indian Tribe, Hopi Nation (Hopi Telecommunications, Inc.), Jena Band of Choctaw Indians, Kaw Nation, Mescalero Apache Tribe (Mescalero Apache Telecom, Inc.), Navajo Nation, Nez

Perce Tribe, Pascua Yaqui Tribe, Pueblo of Acoma, Pueblo of Jemez, Pueblo of Zia, San Carlos Apache Tribe (San Carlos Apache Telecommunications Utility, Inc.), Tohono O'odham Nation (Tohono O'odham Utility Authority), and Yavapai-Apache Nation and from organizations including the Alaska Native Health Board, Bristol Bay Area Health Corporation, Native Public Media, National Tribal Telecommunications Association, and Tuba City Regional Health Care. . . ."

Question 2: The FCC recently sought comments on an NPRM that proposes to modernize the 2.5 GHz band, better known as Educational Broadband Service or EBS. EBS has been a successful public-private partnership model that benefits educators, commercial entities, and the public. I support plans that allow schools, tribes, and nonprofits to get new licenses before moving to auction. Do you agree that educational entities should have an opportunity to get new licenses before any auction? (Yes/No Question)

Response: This is an ongoing proceeding, the FCC having issued an NPRM on this topic earlier this year. The record is still open, and we have not made any definitive judgments on the way forward. Nonetheless, we have proposed to accommodate various interests of educational entities involving this spectrum. For example, in paragraph 17 of the NPRM, we specifically sought comment "on whether we should first open up to three new local priority filing windows to give existing licensees, Tribal Nations and educational entities an opportunity to access 2.5 GHz spectrum to serve their local communities."

Question 3: I know that the FCC is considering allowing current licensees to sell their licenses to commercial entities. Do you think licensees should be allowed to sell to anybody?

Response: No. An entity or person must be qualified under the Communications Act and the Commission's rules before the Commission would approve the assignment of any license.

Question 4: I support the Commission's efforts to enable increased spectrum for broadband services, particularly in rural states such as mine. For that reason, I am encouraged by some of the FCC's recent actions, including its current consideration of proposals to encourage wireless use of the 3.7-4.2 GHz spectrum band. I do however have concerns that any new or shared uses within this band—known as the "C-band"—might interfere with television and radio broadcasters', including small, public broadcasters, use of satellite services for distribution of their content to local stations across the country. Can you commit that any new or additional uses of the c-band will not result in harmful interference or forced relocation from this band for incumbent users?

Response: As you know, our consideration of the C-band is ongoing; the period for public input is still open (in fact, initial comments are due on October 29 and reply comments are not due until November 27). Our goal is to determine how best to use this important band in order to help bridge the digital divide in our country and deliver American consumers the best value for this public resource. We are simultaneously urging those who are currently using the band to register with us. We need this information because we can't protect current users if we don't know they exist. Whatever decision we make, we aim to make sure we have a smooth transition.

Committee on Commerce, Science, and Transportation
"Oversight of the Federal Communications Commission"
Thursday, August 23, 2018

Questions for the Record
Senator Margaret Wood Hassan

Question 1. In your written testimony, you highlight that American companies are launching satellites to provide broadband to underserved areas. Improving rural, or otherwise underserved areas access to broadband and closing the digital divide should be a priority of the Federal Communications Commission (FCC).

American companies are working to find innovative ways to develop and deploy cutting-edge technology to bridge the digital divide. There are many exciting proposals under consideration by the FCC, including stratospheric-based communications services that will support the rapid deployment of next-generation services in rural and underserved areas.

What are the FCC's plans for enabling innovative new technologies and services that would aid in closing the digital divide?

> **Response:** Closing the digital divide is my top priority as Chairman. Accordingly, we're thinking broadly and acting quickly to make sure we consider and encourage innovative new technologies. For instance, we're streamlining our non-geostationary satellite orbit (NGSO) rules to help facilitate the deployment of large satellite constellation systems. Our hope is that NGSO constellations can create an effective mesh network in space to provide access to millions of unserved Americans and more competition for millions more. We're also granting experimental licenses to entities that want to think out-of-the-box to close the digital divide. From Google's Project Loon in Puerto Rico to companies trying out 3.5 GHz plans, the private sector is responding. Finally, we're broadening our view of universal service programs in order to make sure that we're encouraging non-traditional players. For example, our recently-completed Connect America Fund Phase II auction, which allocated approximately $1.5 billion for fixed broadband in unserved areas, awarded funds to fixed wireless companies, electric cooperatives, and others who have shown a willingness to deploy broadband infrastructure in hard-to-serve places.

Question 2. It is my understanding that Commissioner Rosenworcel worked to include maternal health issues in the recently passed Notice of Inquiry on the FCC's proposed telehealth pilot program. Given that the inclusion of maternal health issues is critical for rural women and their families, will you commit to maintaining them, if this program moves forward?

> **Response:** The Connected Care Pilot Program Notice of Inquiry you referenced has always included maternal health among the many health services that may be supported under the program. We look forward to reviewing the record that develops in response to the Notice and will keep this issue in mind should we proceed to a Notice of Proposed Rulemaking.

Questions for the Record from Sen. Cortez Masto
Senate Commerce Science and Transportation Committee Hearing:
"Oversight of the Federal Communications Commission"
Thursday, August 16, 2018 at 10:00pm SR253

For The Honorable Ajit Pai, Chairman, Federal Communications Commission

Net Neutrality Comment Period

A recent FCC Inspector General report recently concluded, despite the FCC's repeated claims that comment period for the net neutrality repeal was the subject of a cyberattack, that it was actually just the comment system simply being overwhelmed with public outcry against the rollback of net neutrality.

Question 1. Does the FCC have estimates as to how many people may have lost their ability to comment during the time when the system was down? If so, please provide that number.

Response: We do not have such an estimate. However, the docket was open from April 27, 2017—when the Commission released a copy of the Notice of Proposed Rulemaking that the Commission was going to consider at the May 23, 2017 Open Meeting—until August 30, 2017—the date to which the Wireline Competition Bureau extended the comment deadline. That was 125 days—or 3,000 hours—that the docket was open for comment, and the system was available over 99% of the time. Thus, there was more than ample time for people to file their comments in the official record of this proceeding.

Question 2. John Oliver's show had made the FCC aware of the fact it was airing a segment on net neutrality and advocating for viewers to leave comments, was the FCC's IT staff and CIO made aware of this outreach?

Response: The Office of Inspector General report concluded that there is not evidence that the IT staff and CIO were made aware.

Question 3. When did you first learn that the attack may not have happened?

Response: On January 23, 2018, my Chief of Staff was told by the Office of Inspector General (OIG) that OIG had concluded that the former Chief Information Officer's assessment was wrong and that a DDoS attack had not occurred. My chief of staff orally conveyed that information to me, as well as OIG's request that our office not disclose the fact or substance of its investigation to anyone.

Question 4. Did this cause you to give any consideration to delaying the process in order to more fully understand what happened and ensure proper time for public input?

Response: No. Among other things, I did not receive this information until after the Commission adopted the *Restoring Internet Freedom Order*. Moreover, as indicated in my response to question 1 above, people had ample opportunity to express their views to the Commission in this proceeding.

Question 5. Why did the FCC, despite doubts cast by the tech community, Congress, and the press, issue such statements calling the press reports "categorically false" and claiming to have "voluminous documentation" of an attack?

Response: The agency relied on the representations of career staff, most importantly the former Chief Information Officer—representations that, as the Office of the Inspector General later determined, were inaccurate.

Question 6. Did you have any indication, aside from Mr. Bray's assurances, that the FCC had voluminous evidence of this supposed attack?

Response: See response to question 5.

Question 7. In hindsight, how would you have handled the situation differently?

Response: Knowing what I know now, I would have relieved the then-Chief Information Officer from his duties immediately after becoming Chairman of the agency in January 2017.

Net Neutrality

Multiple reports have shown that ISPs have throttled content and have begun creating tiered service in the wake of the net neutrality repeal.[1] [2] [3]

Question 1. If these trends continue, or become commonplace, will you reconsider your views on net neutrality rules?

Response: The reports you cite confirm that these practices have nothing to do with the June 11 repeal of utility-style Internet regulations. Indeed, they were permitted under the previous regulations, and companies, such as T-Mobile, were engaging in them while those regulations were in effect. In any event, the adoption of the *Restoring Internet Freedom Order* last December restored the Federal Trade Commission as the cop on the beat, and that agency is both able (given its broad jurisdiction over any "unfair or deceptive" trade practice or "unfair method of competition") and willing (given Chairman Joe Simons' repeated public commitments) to investigate and take action against any anticompetitive conduct that it finds in the Internet marketplace.

Question 2. If not, are there any actions that ISPs could take that would make you reconsider your views on the repeal of these rules?

Response: We have two decades of experience under the light-touch regulatory framework to which the FCC has returned. That experience teaches that the Internet economy thrived without (and I would argue due to the absence of) utility-style regulations. Going forward, I am confident in both our agency's determination to enforce its transparency rule against ISPs

[1] https://arstechnica.com/information-technology/2018/07/comcast-starts-throttling-mobile-video-will-charge-extra-for-hd-streams/?utm_campaign=Newsletters&utm_source=sendgrid&utm_medium=email&mc_cid=cebfe51b52&mc_eid=bf11efc24c

[2] https://arstechnica.com/information-technology/2018/07/charter-launches-mobile-service-throttles-all-video-to-480p/

[3] https://www.att.com/esupport/article.html#!/directv/KM1131836?gsi=A

and the Federal Trade Commission's ability to police those companies with respect to anticompetitive conduct. In the meantime, I would certainly encourage and be willing to work with Congress on codifying the basic principles of an open Internet into statute—principles with which I agree and which historically have united both sides of the aisle.

Question 3. Do you believe if ISPs give preferential treatment to their own services that is compatible with the value of a free and open internet?

Response: To the extent that an ISP acts in an anticompetitive manner, such action could undermine the free and open Internet. The Federal Trade Commission and the Department of Justice, with their long histories of antitrust enforcement, are best positioned to police any potential anticompetitive conduct.

Spectrum

As you know, spectrum will be vital part in deploying 5G. There have been a variety of pushes from industry for spectrum both for millimeter waves and mid-band spectrum below 6 GHz.

Question 1. What is the balance between mid-band spectrum and millimeter waves, and how have other countries struck that balance as they have worked to deploy 5G?

Response: The Commission has adopted an all-of-the-above approach to spectrum, including mid-band and millimeter wave spectrum. That's why we have within the last year teed up proceedings on the 2.5 GHz band, the 3.5 GHz band, the 3.7-4.2 GHz band, the 4.9 GHz band, the 26 GHz band, and the 42 GHz band, set for auction the 24 GHz band and the 28 GHz band, teed up an auction for the Upper 37 GHz band, 39 GHz band, and 47 GHz band in 2019, and proposed new service rules for bands above 95 GHz.

Other countries and regions have different approaches, but generally speaking they are also pursuing multiple bands of mid-band and millimeter wave spectrum in order to ensure as broad a foundation as possible of 5G development.

Question 2. How does freeing up mid-band spectrum for 5G use impact rural access, especially with the high demand for these bands for rural areas?

Response: Increasing the usage of the mid-band spectrum like the 2.5 GHz band and the 3.5 GHz band will be critical to our nation's 5G efforts as well as ensuring widespread deployment of high-speed broadband services to rural America. I believe that rural consumers have waited long enough for high-speed broadband, and we cannot as a nation afford to lose the race to 5G.

Federal Broadband Coordination

The federal government has been involved in helping make the case for private companies to bring broadband to underserved areas for a long time. It's crucial that every federal dollar that goes to these communities is well spent, not duplicative, and gets sent out in a timely manner.

Question 1. What are some of the challenges for better coordinating federal resources and efforts to further deploy high-speed broadband?

Response: The fundamental challenge is ensuring that taxpayer dollars are devoted to connecting unserved areas. The alternative is federal support for overbuilding projects, which disserves consumers who lack access, undermines the government's role as a fiscally responsible steward, and displaces private investment. We welcome coordination with our federal partners and private sector entities to ensure we are not duplicating efforts.

Question 2. Do you consider current tools, such as working groups, sufficient to improve efforts to curb overbuilding and duplication?

Response: Working groups certainly can help and have aided in this effort, and we always are willing to work with our colleagues to curb the use of federal funding to support overbuilding projects.

Robocalls

Robocalls are one of the top complaints received by the FCC. Protecting consumers from these calls will take technological as well as enforcement efforts.

Question 1. Do you believe stronger enforcement efforts could offer further deterrence for people making illegal robocalls?

Response: Yes, I believe our stronger enforcement efforts (including imposing the largest fine in the FCC's history) can have a deterring effect on illegal robocallers. I intend to continue our vigorous enforcement actions against these unlawful activities.

Question 2. Are fines enough to crack down on the worst offenders?

Response: We must have a multi-prong strategy, and that is why the Commission has attacked the robocalls problem on multiple fronts: taking enforcement action against offenders, taking necessary regulatory steps to empower consumers to avoid unwanted robocalls, making available lists of caller IDs used in robocalls to aid development of call filtering tools, and supporting industry efforts to harness technological developments to better protect consumers (such as allowing voice service providers to block robocalls that, based on Caller ID, appear to be from phone numbers that are invalid, unallocated, or unused, or from numbers that are not used to make outgoing calls). With respect to enforcement matters, under the Communications Act, the FCC only has civil authority to combat illegal robocalls. We defer to Congress and other law enforcement agencies regarding criminal action.

Nationalizing 5G

As you are aware, the Trump administration has suggested that nationalizing the 5G network could be necessary for national security.

Question 1. Do you believe that the private sector is best positioned to move forward with 5G?

Response: Yes.

Broadband for Native Americans

Nevada is one of the nation's leaders in school broadband thanks to E-rate modernization.

Since the modernization order in 2014, we have seen 100% of our students reach the FCC's short-term bandwidth goal—this is quite the achievement in some of our very rural counties. But there is still work to be done—in our state alone, over 3,400 Native American students still lack scalable broadband infrastructure. This year, Nevada school districts have requested E-rate funding to bring nearly $1.5 million in new fiber "special construction" to schools. Our state leaders have established an E-rate matching fund to accelerate these fiber builds as well. However, funding decisions have been delayed, leading to uncertainty.

Question 1. Can you commit to working with my office and Congress to provide certainty to e-rate funding decisions to help bring broadband to our most rural areas?

Response: Yes.

Child Protection Rules

The FCC has moved quickly to revise child television rules under the Children's Television Act, arguing that new modes of watching require updating the rules. In the proposed rulemaking, you propose to eliminate the requirement that broadcasters air their programming on main program streams, which would allow them to move to multicast streams. Low income kids really rely on this programming for education, so it's very important we get this right.

Question 1. Why not first issue a Notice of Inquiry, to fully examine the issue rather than move forward on such an aggressive timeline?

Response: Our approach in this proceeding reflects the exact process prescribed by the Administrative Procedure Act: a notice of proposed rulemaking that "give[s] interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments." 5 U.S.C. § 553(c). Far from a rush to judgment, the NPRM incorporates an extended time period for input, reflecting the FCC's desire to receive thoughtful public comment. The NPRM was adopted in early July, but the comment deadline (September 24, 2018) has not even arrived as of the date of this submission and the reply comment deadline will come in late October. Thereafter, the agency's staff will study the record and recommend the appropriate way forward.

Question 2. Multicast streams have 10% of the viewership as a main feed, how will a move to these streams not be hugely disruptive to the current system?

Response: The issue of use of multicast signals for the provision of children's television programming is currently under consideration as part of our open proceeding. The Commission is soliciting public input on this issue and will make a decision on whether and how to modify existing rules based on the record.

TV Markets in Northern Nevada

In Northeastern Nevada, we have a Designated Market Area (DMA) that is shared with Utah and as a result, many constituents there have trouble getting news about information in Nevada, such as the happenings of the state government. Most importantly, they need emergency updates that come from Nevada.

Question 1. If they wished, could localities there apply for a dual DMA and can you commit to working with my office on all possible solutions for these constituents?

> **Response:** Today, cable operators, satellite providers, broadcasters, and counties (only with respect to satellite market modifications) are able to file a petition with the FCC to modify markets for cable and satellite carriage in order to potentially provide in-state stations to consumers who currently reside in areas assigned to a DMA that provides out-of-state stations. Detailed information on this process can be found on the Commission's website. We are able to provide assistance to Congress in this regard if needed.

Wearables/Rural Health

One exciting technology that will be enabled as we move to the internet of things and 5G is wearable technology and the possibilities for better health outcomes, including for rural Americans.

Question 1. Can you point to an example you have seen about how this technology is being deployed in a way that improves people's lives?

> **Response:** Perhaps the best example I have seen came at Augusta Health, a regional health care facility in rural Staunton, Virginia. Medical professionals there explained how they had given wearable devices with wireless sensors to patients who had had surgery in order to monitor their vital signs. As a result of being able to track these signs and intervene more quickly when patients were showing signs of regression, Augusta Health was able to reduce the incidence of sepsis by 38%.
>
> More generally, wireless technology can dramatically improve the diagnosis of problems and speed and efficacy of treatment. For instance, the Cleveland Clinic deploys a mobile stroke unit with advanced wireless capability in order to assess and stabilize a patient 38 minutes more quickly than before (vital, since a stroke victim loses 2 million brain cells per minute). And as highlighted in a November 2017 White House report, telemedicine can connect opioid patients to caregivers when there is no other option, with wearable biosensors detecting real-time drug use and alerting a family member or first responder to intervene.

Question 2. How can Congress help assist the FCC in ensuring the deployment of this technology in the future?

> **Response:** The Commission is considering this in the August Notice of Inquiry seeking comment on a proposal for an experimental "Connected Care Pilot Program," led by Commissioner Carr. Based on my own study—which includes visits to telemedicine facilities in Idaho, Utah, Colorado, Florida, Kansas, Rhode Island, and elsewhere—I would

recommend Congress consider a few legislative fixes: (1) interstate medical licensure, as cross-state licensure is commonly cited as the biggest barrier to telemedicine across state lines; (2) Medicare/Medicaid reimbursement for telemedicine services; and (3) granting the FCC more flexibility in structuring the types of telemedicine services and networks eligible for support.

Local Concerns

I have heard from many local communities in Nevada about their concerns about preemption of their authority over the citing and placement of wireless and other telecommunications facilities. Common sense measures to update regulations for new technology are important, but must also ensure that local communities have power to make decisions for themselves.

Question 1. Do you understand some of the concerns of local communities over the FCC's recent orders and what have you done to engage with these communities to ensure they feel respected during this process?

Response: Commissioner Carr has been leading our wireless infrastructure efforts, and he and I are well aware of local concerns regarding this issue. We have conducted extensive outreach to ensure that we consider all legitimate concerns in the rulemaking process. Our processes are designed to encourage public input and provide for a transparent and respectful review of conflicting points of view.

Senator Jon Tester

Written Questions Submitted by Hon. Jon Tester to Federal Communications Commission

Question 1. I understand the FCC is working on a rule to assess whether to establish a program under which a spectrum licensee may partition and sublease the license to an unaffiliated carrier to serve a rural area. What is the status of that rule? What other steps are you taking to make sure rural carriers that want to buildout in rural America have access to Spectrum?

Response: RAY BAUM'S Act required the Commission to initiate a proceeding to consider rules regarding the partition and sublease of licenses to small carriers in rural areas by March 23, 2019. Our staff in the Wireless Telecommunications Bureau are currently studying options on how to proceed.

We are also exploring other tools to increase the efficiency of spectrum use and repurpose spectrum for next-generation services, including in rural areas. For example, last year we issued a Report and Order and Further Notice of Proposed Rulemaking to establish uniform license renewal, discontinuance of operation, and geographic partitioning and spectrum disaggregation rules and policies for certain wireless radio services—including potentially increasing buildout requirements in rural America. The comment period is now closed, and our staff is reviewing the record on how to proceed.

U.S. SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
OVERSIGHT OF THE FEDERAL COMMUNICATIONS COMMISSION,
AUGUST 16, 2018

QUESTIONS FOR THE RECORD
SENATOR TAMMY DUCKWORTH

Questions for Chairman Ajit Pai:

Question 1: In its reconsideration last year of the 2014 Quadrennial Media Ownership rules, the FCC addressed the issue of the attributing of stations involved in shared services and joint sales agreements for the purpose of applying the local ownership rules. The FCC has not done so, however, in its notice of proposed rulemaking issued late last year regarding the potential modification or repeal of the national ownership cap. Will you commit to initiating a broad rulemaking about the attribution of stations for the purpose of applying the national ownership rule, should you decide to retain it? Please explain your reasoning.

Response: The Commission did not initiate a separate rulemaking to address the attribution rules is light of the national cap rulemaking because, as you note, the Commission had just ruled on the attribution rules (that apply in the context of all media ownership rules) the prior month.

Question 2: The FCC designated the Sinclair-Tribune transaction for a hearing in part because it found that there exists a substantial and material question of fact as to whether Sinclair was the real party of interest in the application to transfer the license of WGN-TV (Chicago). The FCC noted that Sinclair would have owned most of WGN-TV's assets, would have been responsible for many aspects of the station's operations, and would have had an option to purchase the station in the future. Sinclair has similar relationships with three stations in the Wilkes Barre, Pennsylvania, and a television market and two stations in the Gainesville, FL, market. Does this situation give you reason to consider whether such relationships might be attributable for the purpose of applying the FCC's national media ownership cap? Why or why not?

Response: At this point, the Administrative Law Judge has yet to rule on a request from the parties to withdraw the applications that were part of the Hearing Designation Order. Until the Administrative Law Judge acts, the Hearing Designation Order is still in effect, and I do not believe that it would be appropriate for me to express a view on this issue.

Question 3: In May of this year, you accepted the recommendations from the North American Numbering Council (NANC) regarding the call authentication ecosystem, namely the adoption and deployment of "SHAKEN/STIR," the set of procedures and protocols intended to eliminate the use of illegitimate spoofed numbers from the telephone system. This report also included milestones for deploying SHAKEN/STIR. Please provide an update on the SHAKEN/STIR development and deployment process since the NANC report was submitted to the FCC three months ago.

Response: Since the May 2 NANC report, industry stakeholders have begun the process of establishing a governance authority and associated mechanisms for SHAKEN/STIR through the Alliance for Telecommunications Industry Solutions. This governance body provided a report on its progress at the September 13 NANC meeting. The Commission has continued to follow up with telecommunications providers, software vendors, hardware manufacturers, and other stakeholders to assess industry readiness to adopt and deploy the SHAKEN/STIR standards for call authentication.

Question 4: The 2016 trial of the Do Not Originate Registry was, by nearly all accounts, a success. When do you believe the DNO Registry will become operational?

Response: In 2017, the Commission authorized voice service providers to block calls on the "do-not-originate" list, *i.e.*, calls falsely purporting to be from a telephone number used for inbound calls only (among other things). Carriers under USTelecom's leadership operationalized the do-not-originate list in early 2018 once those rule changes became effective.

Question 5: In January 2017, the FCC withdrew from consideration rules that would have protected consumers from harassing robocalls from debt collectors servicing federally-backed loans. These callers, according to consumer groups, offer no easy way for consumers who are wrongly receiving these calls to get their numbers removed from the robocallers' list. What was the justification for withdrawing these rules and does the FCC plan to provide any protections for consumers going forward?

Response: In 2016, the Commission (over my dissent) exempted all federal contractors, including federal debt collectors, from the TCPA in the *Broadnet Order*. Later in 2016, parties sought reconsideration of that decision along with the adoption of the rule to implement the Budget Act Amendments regarding federal debt collection. To allow the Commission time to carefully consider the legal and policy issues, including questions about our statutory authority, the rules have not yet become effective. The Commission sought renewed comment on these issues in May 2018 and is reviewing the record now.

Question 6: Some carriers provide robocall blocking services free to their customers, while others do not. Does the FCC have plans to require telephone companies to provide these tools free of charge? If not, what remedy will there be for consumers who cannot afford to pay for these services?

Response: I applaud those carriers that have devoted their resources to solving the epidemic of unlawful robocalls and especially those that offer such services to consumers for free. Indeed, many consumers benefit from robocall blocking services—like the Do Not Originate registry—without even knowing it because such services are built into a carrier's network. Given that there is no silver bullet to ending unlawful robocalls and the wide experimentation going on in the market now, I would be concerned that preemptive price regulations would stifle needed innovation while also being unnecessary given that consumers generally have the ability to choose a carrier that offers such services for free.

Question 7: In April of this year, the House Committee on Energy and Commerce held a hearing on robocalls and caller ID spoofing. At that hearing, a witness testified that consumers who still have traditional copper phones lines, often senior citizens, may not have access to blocking options to protect them from robocall scammers. What is the FCC doing to educate or otherwise protect these customers? How will the FCC track and report these concerns to the public?

Response: We have undertaken a major outreach campaign to reach older Americans and alert them to robocalls scams. On September 18th, the FCC will team up with AARP on two tele-townhalls to inform older Americans about phone scams and what they can do to avoid being victims. We are also working with the American Library Association to furnish libraries throughout the nation with FCC Consumer Guides and Tip Cards for all patrons, many of whom are 65 and over. We use information gathered from consumer complaints about robocalls to post consumer alerts about current scams such as "grandparent scams," "Social Security scams," "IRS scams," and others that target older Americans. We also share this information with national and local community groups.

Question 8: The FCC adopted, as part of its March 2016 Lifeline modernization order, a plan to establish a National Lifeline Eligibility Verifier (National Verifier) to help prevent fraud, waste, and abuse in the Lifeline program. The National Verifier database is a centralized system to verify whether individual subscribers are eligible to participate in the USF Lifeline program by verifying a subscriber's identity and eligibility status, thereby preventing duplicate enrollments. What is the status of the National Verifier and when can we expect that all U.S. states and territories will be included in the database?

Response: The National Verifier soft launched in six states—Colorado, Mississippi, Montana, New Mexico, Utah, and Wyoming—in June 2018, enabling service providers to begin optionally using the system to check consumer eligibility. Hard launch (where use of the system is required) in these six states should occur later this year. The Commission has targeted a launch in all states and territories by December 31, 2019.

Question 9: The FCC issued, in November 2017, a notice of proposed rulemaking seeking comment on proposals to further modify the Lifeline program. Included in those proposals was one which would exclude non-facilities-based providers—that is, providers that do not build or maintain their own network facilities—from participating in the program. What impact would such an exclusion have on the number of eligible providers offering wireless and wireline Lifeline service and how would this affect the ability of subscribers to access Lifeline service?

Response: The Commission not reached any conclusion as to whether resellers should be permitted to continue to participate in the Lifeline program, and your question is one of the issues that is being explored in the pending rulemaking proceeding. We continue to review this issue because resellers have been the subject of the vast majority of Commission Lifeline investigations for waste, fraud, and abuse. Furthermore, we are examining how the Lifeline program can support investment in broadband networks where they are needed most—in low-income urban communities, in rural areas, and on Tribal lands.

Question 10: Since the FCC modernized the E-Rate program, it has made digital learning a reality for thousands of Illinois students and Illinois recently took steps to create a state E-rate

matching fund to accelerate fiber buildouts to our schools. I am increasingly concerned about the large number of fiber projects that have been administratively delayed by the FCC, especially those that involve a state funding match. In the past two years alone, 22 Illinois school districts have had their broadband upgrades delayed because of bureaucratic challenges in the E-rate application approval process. In 2018, 16 Illinois school districts applied for broadband upgrades to give their students greater learning opportunities totaling more than $1.4 million in new investment. Yet as of today, *none* of these schools have received funding decisions. With less than three weeks until the September 1st target date for completing all funding decisions, what will you do to prioritize E-Rate and address the growing concerns around delays in fiber approvals?

Response: The Commission is committed to ensuring that the E-rate program connects students everywhere with the digital tools they need to succeed. USAC has processed nearly 95% of workable FY2018 E-rate applications and committed significantly more funding so far this year ($1.68B) than it had committed around this time last year ($965M). And the FCC is working closely with USAC to ensure that the remaining FY2018 E-rate applications get processed as quickly as possible so that all schools, including those in rural areas, can obtain funding for much needed broadband infrastructure and bridge the digital divide for their students.

Senator Blumenthal Questions for the Record
Senate Committee on Commerce, Science, and Transportation Committee
"Oversight of the Federal Communications Commission"
August 16, 2018

Questions for Chairman Pai

Question 1. The Wall Street Journal's Editorial Board recently praised your decision to challenge the Sinclair-Tribune merger, stating that "the FCC Chairman follows the law in stopping a merger."[4] The editorial concluded by saying, "it's up to Congress to change broadcast ownership restrictions." Do you agree that only Congress has the authority to change broadcast ownership restrictions, like the national television audience reach cap?

> **Response:** This issue is currently under review in an open proceeding. I would note, however, that the prior Administration asserted that it did have the authority to modify the national cap when it decided to eliminate the UHF Discount in 2016. Specifically, the FCC majority explained:
>
> "We conclude that the Commission has the authority to modify the national audience reach cap, including the authority to revise or eliminate the UHF discount. *We find that no statute bars the Commission from revisiting the cap or the UHF discount contained therein in a rulemaking proceeding so long as such a review is conducted separately from a quadrennial review of the broadcast ownership rules pursuant to Section 202(h) of the 1996 Act*. The [2004 Consolidated Appropriations Act] simply directed the Commission to revise its rules to reflect a 39 percent national audience reach cap and removed the requirement to review the national ownership cap from the Commission's quadrennial review requirement. *It did not impose a statutory national audience reach cap or prohibit the Commission from evaluating the elements of this rule*. Thus, the Commission retains authority under the Communications Act to review any aspect of the national audience reach cap; it simply is not required to do so as part of the quadrennial review." (footnotes omitted; emphasis added)

Question 2. A December 2017 Notice of Proposed Rulemaking explores gutting one of the last few remaining rules protecting consumers from massive consolidation in media: the media ownership cap. Didn't Congress—through the Consolidated Appropriations Act of 2004—very clearly instruct the FCC to set this cap at 39 percent? What authority would the FCC now have to change this cap?

> **Response:** See response to Question 1 above.

Question 3. With the launch of 5G technology, there are renewed concerns regarding the risks of radiofrequency radiation.[5] What role does the FCC play in making sure exposure to 5G airwaves by occupational workers or consumers remain at safe levels? To that end, what is the FCC doing

[4] https://www.wsj.com/articles/ajit-pai-and-sinclair-1531955296

[5] http://www.latimes.com/business/la-fi-cellphone-5g-health-20160808-snap-story.html

to understand whether exposure to RF radiation and 5G technology may be linked to health risks for certain occupational workers or the general public?

Response: The FCC's rules regarding RF exposure to humans extends to all devices and facilities that transmit RF energy, regardless of the use, service, or technology—the same standards apply to exposure limits whether the device is 4G, 5G, Wi-Fi, or any other kind of radio transmitter. With regard to RF exposure levels and their regulation generally, we have an open proceeding that addresses issues related to our rules implementing RF exposure limits.

Because the FCC is not a health sciences agency, we rely on the recommendations of federal health and safety agencies with extensive experience and knowledge in this area as we review the appropriateness of our limits with respect to RF biological effects and related issues. The Food and Drug Administration (FDA) is the lead federal health agency in monitoring the latest research developments and advising other agencies with respect to the safety of RF-emitting products used by the public, and we work closely with FDA in this regard. I would note that earlier this year Dr. Jeffrey Shuren, head of the FDA's Center for Devices and Radiological Health noted that: "[B]ased on our ongoing evaluation of this issue and taking into account all available scientific evidence we have received, we have not found sufficient evidence that there are adverse health effects in humans caused by exposures at or under the current radiofrequency energy exposure limits. Even with frequent daily use by the vast majority of adults, we have not seen an increase in events like brain tumors. Based on this current information, we believe the current safety limits for cell phones are acceptable for protecting the public health."[6]

The open rulemaking referenced above also is considering clarifications and updates to the rules regarding modern installation and use practices. In addition to signage and barrier requirements related to occupational/controlled exposure, as well as enforcement actions related to this area, the Commission has conducted educational outreach and onsite programming with the Occupational Safety and Health Administration regarding worker safety. We will continue to work with the expert health agencies to ensure that consumers and occupational workers are safe and secure.

Net Neutrality

Question 4. Do you have any knowledge or information as to who was responsible for the fake comments during the Restoring Internet Freedom Order proceeding?

Response: Unfortunately, the current Electronic Comment Filing System (ECFS) cannot validate the user identity of people that file comments into the record. Going forward, we want to mitigate if not eliminate this problem, which is why we are focused on redesigning the ECFS system.

[6] https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm595144.htm; *see also* https://www.niehs.nih.gov/news/newsroom/releases/2018/february2/index.cfm.

Question 5. Did the FCC engage in any internal investigation into the fake comments in the docket? Did the FCC refer the matter to the Department of Justice—has there been any criminal investigation into the fake comments during the Restoring Internet Freedom Order proceeding?

Response: As a general matter, the Commission does not discuss whether a matter is the subject of either an Enforcement Bureau or criminal investigation.

Question 6. Given the IG's findings about your previous CIO's failure to provide accurate information regarding the fake comments during the *Restoring Internet Freedom Order* proceeding, will you commit to an IG investigation into the source and the FCC's response?

Response: The Commission will always cooperate with the Office of Inspector General, as we did in the recent report you mention.

Prior to repeal of net neutrality, several public interest organization warned that we would see small changes first, such as imposing additional fees for high definition video, as ISPs tested the waters to see what they could get away with. Public Knowledge's Harold Feld testified to the Maryland Senate in March that "primary broadband providers will take advantage of this to find new ways to charge customers if they want to get high quality service." Since then, Comcast and Verizon have begun to throttle mobile video for certain data plans unless consumers upgraded to more expensive services.

Question 7. Will we see more requirements that a subscriber must upgrade to the more expensive plans to access specific services or attach certain devices?

Response: The types of data plans mentioned in your question have nothing to do with the June 11 repeal of utility-style Internet regulations. Indeed, they permitted under the previous regulations, and companies were offering them while those regulations were in effect. Of course, to the extent that Internet Service Providers act in an anticompetitive manner, including any allegations relating to your hypothetical, there are ample consumer protection authorities to evaluate and, if appropriate, prosecute any such behavior found to violate the law.

Question 8. Doesn't this new trend of fees for video service demonstrate that net neutrality rules were, in fact, absolutely necessary to protect consumers from price gouging?

Response: Please see response to question 7.

Question 9. Do you consider impersonation or making fraudulent statements within a federal proceeding a crime?

Response: I would defer to the Department of Justice on criminal matters.

Lifeline

In August 2017, USAC removed National Verifier Service Provider API from the National Verifier Plan. This will force eligible Lifeline users to go into an inefficient and confusing two-step process to enroll in Lifeline. Hindering or eliminating service providers' ability to conduct online Lifeline enrollments will have a substantial impact on veterans in rural areas or with disabilities who cannot travel easily to enrollment events or storefronts.

Question 10. Why was the Service Provider API removed from the National Verifier Plan?

Response: As you know, the Commission created the National Verifier in response to widespread waste, fraud, and abuse in the Lifeline program, with the goal of eliminating the role of carriers in verifying the eligibility of consumers. A carrier API could give the very companies that have previously abused the Lifeline program direct access to the National Verifier. In light of the $137 million in abuse that the Government Accountability Office discovered in the Lifeline program last year, we must be careful in designing any carrier API to mitigate the ability of unscrupulous carriers to evade the screening role of the National Verifier.

As such, we have not made a final decision on whether to include a carrier API in the National Verifier. We continue to study the National Verifier's functioning to determine whether one is necessary and whether one can be designed without undermining the National Verifier's work of reducing waste, fraud, and abuse in this important program. In the meantime, carriers are able to work with consumers in person using the National Verifier's service provider portal.

Question 11. Who directed this decision? What role did you play in this decision?

Response: See response to Question 10.

Question 12. Is there any plan to reinstate it?

Response: See response to Question 10.

Question 13. Do you believe that Lifeline is underutilized by eligible Americans, or oversubscribed? Do you commit to continuing the Lifeline program in its full mission?

Response: I am committed to bridging the digital divide, and I believe the Lifeline program can help do just that. That is why the Commission adopted the *2017 Lifeline Reform Order*, which seeks to focus Lifeline support where it is most needed and incentivize investment in networks that enable 21st-century connectivity for all Americans.

MBA Report

Since August 2011, the FCC has published annual reports on nationwide broadband performance based on measurements from consumers under the Measuring Broadband America (MBA). The MBA reports are a critical consumer protection program to ensure that broadband subscribers receive the quality of service advertised to them and enables informed decisions in the marketplace. Unfortunately, the FCC has not published an MBA report or released broadband measurement data since December 2016, which was based on measurements collected in

October 2015. According to an ex parte, the 2017 MBA Report is "still waiting for final approval by the Chairman's office."

Question 14. When do you expect the 2017 Measuring Broadband America report will be published?

Response: Since the Measuring Broadband America report pertains to the communications marketplace, we plan to include 2017 and 2018 MBA reporting as part of the biennial Communications Marketplace Report required by the RAY BAUM'S Act of 2018. Consistent with that Act, we are doing so to consolidate and streamline our various reporting workstreams to reduce the burden of reporting on Commission staff and provide Congress and the public with a single point of reference spanning the entire market.

Question 15. In previous reports, the MBA report has provided charts and data on year-over-year changes in download speeds for broadband consumers. Do you commit to continuing to include these same comparisons to previous years in the 2017 report?

Response: I expect the Communications Marketplace Report will discuss data regarding the broadband marketplace for the past two years, as required by the RAY BAUM'S Act. The timeframes covered will be the same as in past years' MBA reports (i.e., data collected in September/October 2016 and September/October 2017) and the same measurement methodologies will be used. Relatedly, we're looking at the best ways we could release data in advance of the report to make the data more timely and hence more useful to stakeholders.

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C.20554

Office of the Director

December 21, 2018

The Honorable John Hoeven
Chairman
Committee on Indian Affairs
United States Senate
838 Hart Senate Office Building
Washington, D.C. 20510

Dear Chairman Hoeven:

Enclosed please find responses to Questions for the Record submitted for Patrick Webre, Chief of the FCC's Consumer and Governmental Affairs Bureau, regarding his appearance before the Senate Committee on Indian Affairs at the hearing entitled "GAO Reports Relating to Broadband Internet Availability on Tribal Lands."

If you have further questions, please contact me at (202) 418-2242.

Sincerely,

Timothy B. Strachan
Director

Senate Committee on Indian Affairs
Oversight Hearing on "GAO Reports Relating to Broadband Internet Availability on Tribal Lands"
October 3, 2018

Questions for the Record for Patrick Webre
Chief of the Consumer & Government Affairs Bureau Federal Communications Commission
Submitted by Vice Chairman Tom Udall

Tribal E-Rate Timeline

During the hearing, I mentioned that two E-Rate specific recommendations from the 2016 GAO Report on tribal broadband have not been addressed. When I asked about the progress on addressing those two recommendations, you replied that the FCC implemented the first recommendation; the program forms now contain guidance on what qualifies as "tribal." You also stated the USAC's tribal liaison encourages tribal applicants to identify themselves as tribal so it can track who is participating in the E-Rate Program, leading to more accurate data.

1. What else has the FCC done to ensure further progress in addressing these two recommendations from the 2016 GAO report on tribal broadband?

   Response: The Commission implemented the first recommendation from the 2016 GAO Report (GAO-16-222) (i.e., to provide guidance on what qualifies as "Tribal" on E-Rate program forms) in funding year 2017. Specifically, the E-Rate program forms now include guidance about when a school or library should identify itself as "Tribal," and the Universal Service Administrative Company (USAC) has greatly enhanced its method for collecting this information by improving the Tribal "check box" in its system.

   Regarding the second recommendation, the FCC has directed USAC to improve its IT systems for purposes of data collection and reporting about the E-Rate program, and USAC has made substantial progress in this area. For example, in November 2017, USAC rolled out its OpenData platform, which makes E-Rate program data—including data on Tribal schools and libraries—available to the public. It's available at https://opendata.usac.org/. We anticipate this data will be more informative as schools and libraries follow the new guidance on how they can identify themselves as "Tribal," and we expect this data will help the Commission assess its progress in ensuring that all Tribal schools and libraries have affordable access to broadband.

2. When will we see accurate data from the E-Rate program in tribal lands?

   Response: The Commission remains committed to ensuring that all Tribal schools and libraries have affordable access to modern broadband technologies. To ensure that we have accurate data on all Tribal applicants within the E-Rate program, USAC's Tribal liaison encourages Tribal applicants to check the "Tribal" box on E-Rate applications so that USAC can better understand who is participating in the E-Rate program, provide

relevant Tribal outreach and training, and assess the effectiveness of those outreach and training efforts. Educational efforts have included conducting monthly conference calls with Tribal applicants and multiple Tribal-specific training sessions on an annual basis; coordinating with Tribal organizations such as the Bureau of Indian Education, the Association of Tribal Archives, Libraries and Museums, the National Indian Education Association, the National Congress of American Indians, Native Public Media, and the Alaska Tribal Administrators Association; maintaining and updating a Tribal-specific reference webpage on USAC's website; and distributing newsletters tailored to the needs of Tribal applicants. To this end, USAC's Tribal liaison, in coordination with the Commission's Office of Native Affairs and Policy and Wireline Competition Bureau, has made significant strides in engaging Tribal governments and communities, explaining the relevance of the E-Rate program to eligible Tribal schools and libraries, and helping eligible Tribal schools and libraries successfully participate in the E-Rate program.

Challenge Process for Form 477 Data Collection

During the hearing, I mentioned the process for challenging data collected using Form 477. When Tribes challenge the data, Tribes endure a costly appeals process and often are unsuccessful. Tribes also report that this process is skewed in that the Industry controls the reporting of data.

1. How many Tribes have appealed the data collected from Form 477?

   Response: The Commission uses FCC Form 477 to collect voice and broadband data from all facilities-based providers of mobile and fixed telecommunication providers. This data is used to produce reports of the state of voice and broadband coverage in the United States, as well as appropriately inform FCC policy decisions. As recognized in the current Form 477 rulemaking (FCC 17-103), the FCC currently collects information at the census block level, and the Commission is currently considering the best ways to improve the level of detail the Commission collects while appropriately balancing the costs and burdens on the companies submitting the information.

   The semi-annual Form 477 collection currently does not have a formal challenge process as the collection is designed for providers of voice and broadband service to report where they can reasonably provide service upon a request from a customer. This data is then used to produce the various maps and reports the Commission provides on the state of voice and broadband service in the United States. When this data is used to inform the Commission's funding and policy decisions, the Commission appropriately considers the limitations of the Form 477 data. This has resulted in multiple formal challenge processes for Commission funding.

   For example, in both the A-CAM (DA 16-842) and CAF II (DA 15-383) proceedings the Commission instituted a formal challenge process to the areas determined eligible by the models and Form 477 data. No Tribes or Tribal carriers participated in these challenge processes.

   Although the Mobility Fund Phase II auction does not rely on Form 477 data (but instead

separately submitted, standardized mobile broadband data), the Commission opened a window for challenges that lasted through November 26, 2018. Sixteen Tribal governments participated in the MF II challenge process (DA 18-1225).

In the Commission's April 2018 *Tribal Opex Order*, the Commission gave relief to carriers serving Tribal lands, but limited that relief to carriers that had not yet deployed 10/1 Mbps service to 90 percent or more of the housing units on the Tribal lands in its study area. Mescalero Apache Telecom Inc. has filed a petition challenging the Form 477 used to find that Mescalero Apache had more the 90 percent deployment.

2. How many Tribes were successful?

Response: With respect to MF II challenge process, on December 7, 2018, Chairman Pai announced that the FCC has launched an investigation into whether one or more major carriers violated the MF-II reverse auction's mapping rules and submitted incorrect coverage maps. The Commission has suspended the next step of the challenge process—the opening of a response window—pending the conclusion of this investigation.

With respect to the petition filed by Mescalero Apache Telecom Inc., on December 20, 2018, the Commission adopted an order granting relief to the carrier.

Senate Committee on Indian Affairs
Oversight Hearing on "GAO Reports Relating to Broadband Internet Availability on Tribal Lands"
October 3, 2018

Questions for the Record for Patrick Webre
Chief of the Consumer & Government Affairs Bureau Federal Communications Commission
Submitted by: Senator Cortez Masto

Streamlined Applications Process

Reading through the GAO report on partnerships I noticed many of the same concerns that tribal communities have are shared by those in rural areas more generally. Specifically, under section titled "Grant Application Requirements," the report says quote "Representatives from eight of the tribes we contacted told us that in general, the language included in the federal grant applications is difficult to understand or the administrative requirements of federal grants are burdensome." This is similar to concerns I have heard from others in both tribal and nontribal rural areas in Nevada.

Question 1: Do you believe streamlining the applications processes for broadband programs would be helpful for encouraging broadband buildout?

Response: Yes. In all of the Commission's rulemakings devoted to broadband buildout, the Commission focuses on how to best reduce regulatory burdens while ensuring consumer protections.

RUS and E-Rate

Looking at the recent GAO Report on partnerships on tribal lands, there is a focus on ways RUS could help tribes obtain funding to expand broadband deployment on their lands – including through RUS's grant program. I understand that there are 60,000 mostly rural K-12 Native students who attend federally-supported schools that do not have the broadband infrastructure required for digital learning in the classroom.

Question 1: Are any of you aware if there are ways that RUS grant programs could be leveraged to provide the matching funds for the FCC's E-Rate program in order to connect these students?

Response: Yes. In the E-Rate program, the Commission will match, on a dollar-per-dollar basis, up to an additional 10 percent of funds for high-speed connection construction, so long as the connection meets the Commission's connectivity targets of at least 100 Mbps per 1,000 students and staff (users) in the short term and 1 Gbps Internet access per 1,000 users in the longer term as set forth in the *2014 First E-Rate Order* (FCC 14-99). Thus, if an E-Rate eligible Tribal school received RUS grant funding to construct a high-speed broadband connection, the Commission would provide additional funding to match, on a dollar-per-dollar basis, up to 10 percent of the high-speed broadband connection construction costs, so

long as the project provided broadband that meets the Commission's connectivity targets.

Rural Spectrum

In Nevada we have two main metropolitan areas and the rest of the population lives in small towns and rural areas often separated by hundreds of miles. Tribal communities in these areas are not only separated by distance but also mountainous and remote terrain. Another challenge is that this land is almost always owned by the federal government, so we have a very unique situation in Nevada as we try to build out broadband to some of the rural and tribal communities that live in these areas. One of the issues that has arisen is that wireless spectrum works differently in mountainous areas than it does on flat land or in a city.

Question 1: What challenges arise with getting the right spectrum to bring fixed wireless to these areas?

Response: The Commission has worked diligently to make available additional spectrum for use in rural and tribal areas to reduce the cost of providing service. For example, through the broadcast incentive auction, we have repurposed 84 MHz of spectrum from the broadcast TV band to be used for advanced wireless use nationwide. The Commission also recently started an auction of 1.55 gigahertz of spectrum in the 24 and 28 GHz bands that will be essential to 5G deployment and other advanced services, and is working to facilitate an auction of the Upper 37, 39, and 47 GHz bands to further support these types of services. Furthermore, the Commission sought comment on opening a new local priority filing window for rural Tribal Nations in the 2.5 GHz spectrum band. Such a window would allow rural Tribal Nations an opportunity to access 2.5 GHz spectrum to address the educational and communications needs of their communities and residents on rural Tribal lands, including the deployment of advanced wireless services in areas that currently lack such service.

Question 2: What challenges arise with getting infrastructure built on federal lands?

Response: The FCC generally has no direct role in land management agencies' decisions concerning infrastructure deployment on federal lands, but we have taken important steps to support government-wide efforts to reduce barriers to infrastructure investment and deployment. The FCC participated in an interagency working group formed in 2016 to streamline federal agencies' review, pursuant to the National Historic Preservation Act, of the effects of proposed communications deployments on historic properties. That working group's efforts culminated on May 24, 2017, with the Advisory Committee on Historic Preservation's issuance of a Program Comment that authorizes federal agencies to accelerate their processes for identifying and considering the effects of communications infrastructure projects on historic properties, and to exempt certain undertakings from historic-preservation review under specified conditions. And on January 24, 2018, the Broadband Deployment Advisory Committee (BDAC), voted to adopt the report of its Working Group on Streamlining Federal Siting, which recommended that all federal land-management agencies be directed to harmonize their application forms, fees, and procedures for environmental and historic preservation review, communicate more clearly with applicants during the review process, and prioritize their consideration of broadband siting applications such that all

review be completed within 60 days.

Financial Services and General Government Subcommittee

Federal Communications Commission Budget Hearing with Chairman Pai and Commissioner Rosenworcel

Questions for the Record Submitted by Chairman Quigley

Repack

Question: Chairman Pai, to accommodate its 2016 broadcast incentive auction, the FCC recently completed the first of ten phases to repack nearly 1,000 full power broadcast tv stations across the country. These are stations that received no benefit from the auction and wish to continue to serve their viewers. Can you provide an update on how that first phase went, including the number of station moves that were successfully completed, as well as any delays? What were the causes of any delays?

Response: The repack transition process is off to a strong start. As of April 12, 2019, the repack has completed two of the 10 phases that make up the post-auction Transition Scheduling Plan. Approximately one-quarter of the affected television stations (249 stations of the total 987) completed their transition by the end of the second phase. By contrast, according to our original schedule, only 203 stations were supposed to have transitioned by the end of the second phase. We are currently ahead of schedule primarily because the Commission granted permission to a number of stations to move to their new channels before their required phase completion date. Additionally, some stations were granted more time to transition for good cause and in circumstances in which there was no impact on other stations. There were a variety of reasons for these changes, such as the need to coordinate resources with stations assigned to earlier phases or to provide additional time to complete construction.

Question: Chairman Pai / Commissioner Rosenworcel, based on the FCC's experience in the first phase of the transition, do you have concern that additional stations will not be able to complete moves prior to their assigned phase deadlines?

Response: I am optimistic that the transition will stay on target, but we must remain vigilant. The first two phases of the transition have gone well. And going forward, we have a monitoring process in place to help identify and resolve any problems for individual stations so that the overall transition deadline is not impacted. For example, specific Media Bureau staff are assigned to serve as Regional Coordinators to be the first point of contact for stations. These coordinators work with the Incentive Auction Task Force and other Bureau staff to continually monitor the status of the transition by evaluating stations' quarterly progress reports and the draw down on the reimbursement fund. Similarly, our staff is in contact with the industry professionals in the resource chain, including tower companies and equipment manufacturers, to help identify and manage issues as they arise.

Question: Chairman Pai, we have heard concerns about both the lack of availability of tower crews and equipment that may contribute to further delays. Do you share these concerns?

Response: The availability of tower crews and equipment is essential to meeting the established deadlines. Commission staff are in close contact with tower companies and equipment manufacturers to monitor for any issues in the resource chain for transition projects. I have also personally asked both the relevant trade associations and individual members in the tower and

broadcast industries to keep the Commission fully and timely informed on issues they are seeing or anticipate seeing in the marketplace.

Question: Chairman Pai / Commissioner Rosenworcel, viewers across the country rely on access to broadcast television not only for entertainment, but as a lifeline in times of emergency. If a broadcast station through no fault of its own cannot transition to its new frequency prior to its assigned phase deadline, do you believe it should be forced off the air? If not, how will the FCC continue to address these issues?

Response: The Transition Scheduling Plan has built-in flexibility that allows for adjustments on a case-by-case basis while maintaining the overall transition schedule. This framework gives stations several ways to remain on the air by using extensions and special temporary authority, among other tools, even if time runs short and they must vacate their pre-auction channel prior to completing construction on their new channel. So far, the Commission has successfully worked with stations to make sure that they are not forced off the air through no fault of their own.

Suicide Hotline Improvement Act

Congress passed the National Suicide Hotline Improvement Act (P.L. 115-233) last year, which tasks the Federal Communications Commission with studying the feasibility of transitioning the 1-800 number to a single-use N11 code. Furthermore, it asks the FCC to consider recommendations surrounding improved infrastructure and operations (3)(a)(2)(B)(ii)(II). Given that the LGBTQ population is at a heightened risk for suicide, I am requesting a status update on the following:

Question: What is FCC doing to address the concerns raised by over 100 commenters to its open docket to consider the need for specialization of services for LGBTQ populations in relation to implementation of the Hotline Improvement Act?

Response: The Department of Health and Human Services' Substance Abuse and Mental Health Services Administration (SAMHSA), the Department of Veterans Affairs (VA), and the North American Numbering Council (NANC) recently submitted reports to the Commission concerning the feasibility of designating a simple, easy-to-remember three-digit code for a national suicide prevention and mental health crisis hotline system. The Commission staff is reviewing these reports as well as comments filed by interested parties in the docket. These comments include a broad range of submissions by interested parties such as the Trevor Project, which offers a suite of crisis intervention and suicide prevention programs for LGTBQ young people under the age of 25. My office has also met with representatives of the Trevor Project and listened to their concerns about the needs of LGBTQ youth and the resources available for this at-risk population.

Question: Has FCC considered the mandatory training of counselors for identifying and responding to people within high-risk groups, or the diversion of calls to organizations with particular expertise in serving these communities?

Answer: The FCC will consider all of the issues presented by interested parties before issuing its report. If the Commission ultimately recommends that a particular N11 dialing code or other covered dialing code should be used for a nationwide suicide prevention and mental health crisis hotline system, calls to that number would likely be routed to crisis centers overseen by government and public health organizations. Those organizations would likely determine the

types of training counselors receive and whether calls are diverted to organizations with particular expertise.

Question: When does FCC anticipate making final determinations? Will there be further opportunity for public comment?

Answer: The FCC will submit its report to Congress by the statutory deadline of August 14, 2019. Consistent with Congress' directive, the report will recommend whether a particular N11 dialing code or other covered dialing code should be used for a nationwide suicide prevention and mental health crisis system. Before implementing any such recommendation, the Commission would seek public input through a notice and comment proceeding. Interested parties would be invited to fully participate in that proceeding.

Reassigned Number Database

Question: Chairman Pai - Following up on the Commission's final rule on the reassigned number database to help reduce robocalls, it would be helpful to know your timeline. When do you plan to issue the Request for Proposals to implement the database? Do you have a timeline to get it up and running?

Answer: The Commission will move as quickly as we can to get the reassigned number database up and running to ensure that consumers will be protected from these unwanted calls as quickly as possible.

As for a specific timeline, that is dependent upon the process outlined in our December 2018 order establishing the database. That document is available at: https://www.fcc.gov/document/fcc-creates-reassigned-numbers-database-combat-unwanted-robocalls. The Commission directed the North American Numbering Council (NANC) to provide the Commission recommendations about certain technical aspects of database establishment, operation, and funding, within six months of the Order's release, which will be in the next quarter. Then, the Wireline Competition Bureau and Consumer and Governmental Affairs Bureau will seek comment on those recommendations, which will, among other things, include the user interface specifications and data format for voice service providers to report permanent disconnects to the database.

Based on the NANC's input and the comments received about NANC's recommendations, the Commission will proceed with a competitive bidding process to find an independent, third-party administrator. To be efficient, the agency is considering consolidating its North American Numbering Plan Administrator and Pooling Administrator requirements with its new reassigned numbers database requirements under a single contract. Earlier this month, the Commission issued a Request for Information to gather market research on this consolidation. That document is available at: https://www.fbo.gov/spg/FCC/FCCOMD/FCCCPC/FCCRFI-2019-NANPA-PA-RNDA/listing.html.

Financial Services and General Government Subcommittee

Federal Communications Commission Budget Hearing with Chairman Pai and Commissioner Rosenworcel

Questions for the Record Submitted by Congressman Stewart

It is no secret that many members of this Congress and other third-parties have serious concerns about the Commission's broadband mapping data. This problem is of particular concern for this committee because, if the Commission's broadband maps are unreliable, the billions of dollars in loans and grants you allocate for rural broadband expansion may not be properly targeted. Your funding allocation process may overlook areas with no broadband access that are marked as covered on your map, and 2) waste taxpayer dollars by overbuilding in other areas.

Question: Do you share the concerns about the accuracy of the FCC's broadband mapping data? If so, what are you doing to fix it?

Response: I do share those concerns about the mapping methodology established by the prior Administration. Closing the digital divide is my top priority. Broadband must be available to all Americans, regardless of where they live. Updated and accurate broadband data is essential to accomplishing this goal. We must understand where broadband is available and where it is not to target our efforts and limited funding to those areas most in need.

Accordingly, in August 2017, the Commission initiated a further proceeding to take a focused look at the Commission's Form 477, which collects information about broadband deployment to end-user locations across the U.S. In that proceeding, we have teed up ideas for collecting more granular and standardized data to increase its usefulness to the Commission, Congress, the industry, and the public. As the staff reviews the record, they also continue to work to improve the accuracy of the data submitted to the FCC through internal analysis and filer engagement, issue reports, update existing maps, and release new maps with additional information about fixed and wireless broadband services.

Form 477

The FCC Form 477 broadband data collection process, marks an areas as having broadband access if the provider serves or could serve that area.

Question: Are you considering revising Form 477 to focus the data solely on areas that are served and remove the "could serve" question so as not to inflate the numbers?

Answer: Yes. As noted above, we have an open Further Notice of Proposed Rulemaking (FNPRM) related to this matter.

Question: Will you incorporate your subscription data as well as third-party data sources into your decision-making until you can improve the accuracy of your broadband access data?

Response: Historically, the Commission has not made filer-specific broadband subscription data collected on the Form 477 routinely available to the public due to competitive concerns. We are able, however, to compare subscribership and availability data to cross-check and validate the service providers' deployment data. Although subscription data is very important to helping the Commission understand how many Americans are using broadband networks and what kinds of

services they are adopting, subscription data is of limited use in broadband deployment decision making. Subscription data is not a good substitute for broadband deployment data.

For one, broadband deployment data helps the Commission target funding to parts of America that are not touched by broadband networks. It is imperative that we know all places that providers' broadband services are available, and not just those where they have subscribers. This problem is also aggravated by the fact that broadband subscription data often lags deployment data; it takes time for a service provider to sign up customers for a newly deployed network and then report those customers. Another problem with using subscription data for this purpose is that it is less granular than Form 477 deployment data. While broadband deployment is currently reported at the census block level, fixed broadband subscription data is reported at the census tract level, and mobile broadband subscription data is reported at the state level.

Little high-quality third-party deployment data is available, and that data has its own limitations, including constraints on publication and use. However, we continue to look for opportunities to use data from such sources to inform and enhance the data we gather in the Form 477 collection.

Financial Services and General Government Subcommittee

Federal Communications Commission Budget Hearing with Chairman Pai and Commissioner Rosenworcel

Questions for the Record Submitted by Congressman Mark Amodei

Chairman Pai and Commissioner Rosenworcel: As you know, a key to winning the race to 5G is to speed the adoption of LTE Advanced and 5G NR technologies in U.S. mid-band spectrum. A large and diverse group of companies had hoped that commercialization of the 3.5 GHz Citizens Broadband Radio Service (CBRS) band would be concluded by the end of 2018.

Question: Can you please explain the delay and lay out the timeline for realizing this exciting public-private partnership?

Response: I too am frustrated that progress has not been more swift on moving forward with commercialization of the 3.5 GHz band. Unfortunately, this was not surprising. As I wrote when the Commission first adopted rules for the band *four years ago*, in 2015, "we are moving forward with an experiment to see if we can make this spectrum more productive. Will it work? Have we struck a balance that will allow a variety of innovative uses to flourish? We will see. This Order leaves many important details and complex questions to be resolved, including whether technologies will develop that can manage the complicated and dynamic interference scenarios that will result from our approach. It therefore remains to be seen whether we can turn today's spectrum theory into a working reality."

Since becoming Chairman, I have made it a priority to resolve those important details and complex questions left by the prior Administration. *For one*, the Commission had to rewrite the rules for priority access licenses, which would have made it very difficult to deploy 5G services if left untouched. *For another*, the Commission has been pushing the Department of Commerce to finally wrap up its review of the Environmental Sensing Capabilities (ESC) and Spectrum Access Systems (SAS) necessary for us to proceed with commercialization. And these efforts have now borne fruit: Just this week, the Commission was able to approve three ESC operators, and we expect to approve SASs this summer. In short, we have studiously working to ensure that this experiment is a success—all to the benefit of the American consumer.

Financial Services and General Government Subcommittee

Federal Communications Commission Budget Hearing with Chairman Pai and Commissioner Rosenworcel

Questions for the Record Submitted by Congressman Sanford Bishop

Question: The FCC has a history of ensuring that carriers do not mislead customers. One carrier recently started updating phones to indicate that they are connected to a "5GE" network, despite the underlying technology being an evolution of 4G LTE rather than true millimeter-wave 5G technology. Further, speed tests have found that this "5GE" service is not appreciably faster, and sometimes slower, than other carrier's 4G networks. However, true 5G service is an order of magnitude faster than 4G.

Do you believe the FCC should examine deceptive marketing such as this?

Response: Allegations regarding deceptive marketing practices fall under the jurisdiction of the Federal Trade Commission. Section 5 of the FTC Act expressly "empower[s] and direct[s] the Commission" to prevent companies "from using unfair methods of competition in or affecting commerce and unfair or deceptive acts or practices in or affecting commerce." 15 U.S.C. § 45(a)(2).

Question: I am very troubled by reports that FOIA requests made to the FCC surrounding the public comment process for Net Neutrality repeal were deliberately ignored.

Insight into the behavior of our public officials is essential to trust in government, and it boggles my mind that information related to a public comment process—where individuals have explicitly authorized and requested that their testimony be made public—would be kept secret under an exception normally reserved for the most sensitive of communications.

Given the credible accounts of fraudulent submissions we've heard, it is important that all relevant information be available for view.

What can we do to encourage the FCC's compliance with these important disclosure laws?

Response: The FCC routinely receives and complies with FOIA requests and takes extraordinary measures to ensure that the public has access to information concerning our processes and proceedings. Indeed, a judge appointed to the U.S. District Court of the District of Columbia by President Obama recently found that the Commission complied with FOIA in handling requests for the server logs involved in the *Restoring Internet Freedom* proceeding.

Financial Services and General Government Subcommittee

Federal Communications Commission Budget Hearing with Chairman Pai and Commissioner Rosenworcel

Questions for the Record Submitted by Congressman Crist

Commercial Space Launches

As you are aware, the number of commercial space launches has increased dramatically over the past several years. Each one of these launches requires approvals from the FCC to use certain frequencies necessary to communicate with the rocket. Unfortunately, this process was designed during an era with few commercial space launches and is not structured to support the high cadence of commercial launch seen from the United States today. It requires the FCC to issue Special Temporary Authority for each and every launch. In fact, the FCC must run through this process multiple times for each launch. This was reasonable when there were only a few commercial missions per year, but last year the United States led the world in commercial space launch and is set to do so again this year.

Question: The FCC has had a proceeding pending since 2013 that would begin to streamline this process. Can the FCC complete this proceeding and help the U.S continues to lead the way in commercial space?

I understand that the current process requires emails to be sent manually to multiple agencies. Does your budget provide sufficient funding to automate this process?

Response: I agree that we must lead the way in commercial space. The frequencies that are used to support commercial space launches are allocated exclusively to the federal government. Such launches are supported under grants of Special Temporary Authority. The rulemaking you reference only deals with frequency allocations, not the licensing process to support launches. While the Commission has authorized several commercial space launches over the past years, we will continue to look for ways to improve our process.

Reassigned Number Database

Question: As you know, the issue of robocalls is a complicated one, with many companies getting sued for calling people because they don't have the correct phone number for their customer. One of the ways that the Commission is trying to prevent these types of unwanted calls is by developing a "reassigned number database." As you may know every year about 35 million phone numbers are disconnected and then subsequently made available to new consumers. Hard to believe but there isn't currently a way for a company to know that its customer has changed numbers. Back in November the FCC released its order to create a database of these reassigned numbers (https://docs.fcc.gov/public/attachments/DOC-355213A1.pdf) so companies can check to verify the numbers they are calling. Just last week the FCC released the final rule for this order.

Following up on the Commission's final rule released last week on the reassigned number database to help reduce robocalls it would be helpful to know your timeline. When do you plan to issue the Request for Proposals to implement the database? Do you have a timeline to get it up and running?

Answer: The Commission will move as quickly as we can to get the reassigned number database up and running to ensure that consumers will be protected from these unwanted calls as quickly as possible.

As for a specific timeline, that is dependent upon the process outlined in our December 2018 order establishing the database. That document is available at: https://www.fcc.gov/document/fcc-creates-reassigned-numbers-database-combat-unwanted-robocalls. The Commission directed the North American Numbering Council (NANC) to provide the Commission recommendations about certain technical aspects of database establishment, operation, and funding, within six months of the Order's release, which will be in the next quarter. Then, the Wireline Competition Bureau and Consumer and Governmental Affairs Bureau will seek comment on those recommendations, which will, among other things, include the user interface specifications and data format for voice service providers to report permanent disconnects to the database.

Based on the NANC's input and the comments received about NANC's recommendations, the Commission will proceed with a competitive bidding process to find an independent, third-party administrator. To be efficient, the agency is considering consolidating its North American Numbering Plan Administrator and Pooling Administrator requirements with its new reassigned numbers database requirements under a single contract. Earlier this month, the Commission issued a Request for Information to gather market research on this consolidation. That document is available at: https://www.fbo.gov/spg/FCC/FCCOMD/FCCCPC/FCCRFI-2019-NANPA-PA-RNDA/listing.html.

Financial Services and General Government Subcommittee

Federal Communications Commission Budget Hearing with Chairman Pai and Commissioner Rosenworcel

Questions for the Record Submitted by Congressman Graves

Internet Protocol (IP) Captioned Telephone Service

Question: The FCC's IP CTS program is an ADA service for consumers who are hard of hearing. I have been contacted by consumers and advocates in the hearing loss community with questions about FCC's proposed changes to this program.

Proposals exist currently to reform the program, adjust rates, and authorize alternative technologies, including automated speech recognition (ASR).

What does the FCC plan to do to ensure ASR can perform as least as well as existing services today, or deliver functionally equivalent service before certifying any ASR provider?

Response: As you may know, all but one IP CTS provider already relies on automated speech recognition technology (ASR) to offer service. Indeed, Commission rules have never prohibited the incorporation of ASR technology in recognition that every community deserves the opportunity to access the best possible service.

Last year, the Commission recognized that some had interpreted our rules to prohibit a more efficient, more private, and more effective form of IP CTS—the use of ASR without the inclusion of a communications assistant intermediary. We found that providers could offer near simultaneous communication, enhanced call privacy, the seamless continuation of communications when exigent circumstances (such as severe weather events) threaten call center operations, and substantially lower operating costs without a mandate to place a middleman in every call. And indeed, ASR appears to be approaching—if not exceeding—the levels of accuracy achieved by CA-assisted IP CTS. Accordingly, we eliminated this unnecessary regulatory barrier to innovation, affirmed that any provider offering ASR without a communications assistant must still comply with the mandatory minimum standards of our rules, and must "relay all conversation verbatim." Importantly, we recognized that ASR-provided IP CTS will remain a nascent form of service for a period of time and did not mandate ASR as the sole means of offering IP CTS.

Question: How will you ensure that consumers continue to have access to this critical ADA service?

Response: One key objective to achieve this goal is to reduce waste in the TRS Fund so that we could ensure the continued viability of IP CTS for people with hearing loss who need it. Accordingly, last June, we adopted interim IP CTS compensation rates that will save the TRS Fund at least $399 million over two years, adopted rules to limit unnecessary IP CTS use, and approved, but did not require, the use of speech-to-text automation without the assistance of a CA to generate IP CTS captions, thereby taking advantage of technological advances to modernize IP CTS while achieving greater efficiencies. We based our decision on specific data points—IP CTS carriers currently provide 80% of the total minutes compensated by the Interstate TRS Fund—at a cost of nearly $1 billion. As IP CTS usage continues to grow and the

contribution base supporting the TRS Fund shrinks, potential waste or inefficiencies in this program pose an ever-increasing threat to the sustainability of IP CTS and all forms of TRS.

Question: What has the FCC done to ensure that the full impacts of proposed rate changes are taken into account?

Response: The average per-minute expenses for providing IP CTS dropped from approximately $2.06 in 2011 to $1.23 in 2017. Yet the rate model the Commission was using (based on an averaging of state compensation rates for non-Internet forms of CTS) increased from approximately $1.76 to $1.95 per-minute for the same period. Pursuant to the efficiency mandate of section 225 of the Act and consistent with our prior determinations that TRS rates generally should "correlate to actual reasonable costs," it was necessary to realign the IP CTS compensation rate to correlate to actual reasonable costs for this service. That's why we adopted interim IP CTS compensation rates for the next two years to move these rates closer to actual average cost of providing the service. The Commission adopted compensation rates of $1.75 per minute for the July 2018 - June 2019 period and $1.58 per minute for the July 2019 - June 2020 period as a path toward cost-based rates. We have sought comment and additional data and are considering how to set compensation rates in the future. In the meantime, we have directed the TRS Fund administrator to require IP CTS providers to provide a more detailed breakdown and explanation of the costs incurred. This additional transparency will help us ensure that the costs reported by providers are reasonable. The input from stakeholders and the additional data from providers will ensure that the Commission takes into account the full impacts of the proposed rate changes.

Educational Broadband Service

Question: The Educational Broadband Service licensing and leasing regime has provided opportunities for fixed wireless systems and broadband access in many rural areas where schools, colleges and small rural operators have built these systems. The FCC halted new educational applications for these licenses in 1995. The FCC has recently proposed filing windows to allow Educational Institutions and Tribal Nations to apply for new licenses, making remaining licenses and any licenses with competing applications available via auction.

When does the agency intend on completing this rulemaking?

Answer: FCC staff is actively working on the proceeding and I hope to circulate an item for the Commission's consideration in the near future.

Children's Television Act Modernization

Question: The FCC, implements and enforces the Children's Television Act of 1990. Almost 30 years after Congress passed that law, programming is consumed in ways the law did not contemplate and does not regulate.

FCC rules have not adapted to these changes over time, with the FCC's children's television rules last being revised 13 years ago.

Currently the FCC does not regulate children's programming or advertising on the internet, creating a regulatory imbalance.

I understand the FCC is currently in the process of reviewing and modernizing those rules to account for these new developments.

Chairman Pai, when do you expect the FCC to modernize children's television advertising rules to level the playing field and preserve the safe environment Congress envisioned for our children?

Response: In July 2018, the Commission issued a Notice of Proposed Rulemaking, spearheaded by Commissioner O'Reilly, to update our children's television programming rules. These rules were first established in the 1990s, and the video marketplace (including children's consumption of video programming) has changed dramatically since then. For that reason, the Commission specifically sought comment on proposed revisions to our Core Programming rules and processing guidelines. It also sought public input on modifying existing reporting requirements regarding compliance with the children's television commercial limits. Although this proceeding has taken longer to conclude than I would have anticipated, I hope that that the full Commission will be able to consider a final order in this proceeding in the near-term.

Wireless Rural Broadband

Question: Recently in Georgia, a pilot project was launched that uses vacant TV spectrum to deliver broadband to remote areas where fiber networks remain unavailable. My understanding is that there are a number of regulatory barriers preventing widespread deployment of these technologies.

I understand you recently finalized two orders related to this issue, and that a Further Notice of Proposed Rulemaking (FNPRM) would address issues like the connection of school buses and precision agricultural technologies.

Does the Commission plan to issue a FNPRM to clear up outstanding regulatory barriers and if so when?

Response: We contemplate considering this and other possible rule modifications in a proceeding later this year, keeping in mind the need to ensure TV broadcasting and related services are protected against harmful interference.

Senate Financial Services and General Government Appropriations Subcommittee
"Hearing to review the Fiscal Year 2020 funding request and budget justification for the Federal Communications Commission and the Federal Trade Commission"
May 7, 2019
Questions for Chairman Pai

Questions for the Record from Chairman Kennedy

1. I'm concerned about the fraud, waste, and abuse in some of the Universal Service Fund programs, specifically, the Lifeline program. Last month (April), the FCC's Office of Inspector General issued an advisory and said "Fraud remains a serious problem for the Lifeline program." This advisory also reminded us that just last year, the Office of Inspector General published an audit report which estimated the number of improper Lifeline payments at more than $330 million in FY2017 alone. What reforms is the FCC engaged in and implementing to tackle these improper payments? Does the Office of Investigations have the right amount of resources to tackle this job, including having enough criminal investigators?

   Response: I share your concerns about waste, fraud, and abuse in the Lifeline program, and am aware of the problems cited in the FCC's Office of Inspector General's April 16, 2019 advisory letter. If Lifeline is going to be an effective tool for bridging the digital divide, we must ensure that every dollar spent in the program is spent well.

   Your subcommittee took an important step in assisting us to achieve this goal and address USF fraud issues by approving, per your July 11, 2019 letter, the FCC's creation of a Fraud Division within our Enforcement Bureau. The newly organized division will be comprised of attorneys and investigators with financial crimes experience to enhance and make permanent the FCC's ability to identify fraudulent schemes that have resulted in improper disbursements or other fraud on the government. By identifying these often-sophisticated schemes, the FCC can craft effective and efficient enforcement responses. I will certainly keep you apprised should the agency determine that the resources available to this division are insufficient for the task involved.

   Even before the designation of our new Fraud Division, we aggressively addressed problems in the Lifeline program. For instance, in 2017, the Commission settled five Lifeline improper payment investigations. Under the terms of the relevant consent decrees, these five entities are operating under a compliance plan and have made a total contribution of $2,355,000 to the United States Treasury. And in October 2018, we released a $63 million Notice of Apparent Liability against a Lifeline provider for apparently willfully and repeatedly violating the Commission's rules governing the Lifeline program.

   We have also implemented a number of important administrative changes that will help reduce Lifeline program fraud and improper payments. Rolling out the National Verifier is critical to reducing the unacceptably high rate of improper payments in the program. The National Verifier has launched in 37states and territories as well as the District of

Columbia. Commission staff and USAC are working diligently to meet the December 2019 nationwide rollout deadline established by the *2016 Lifeline Order*.

The National Verifier represents an important step in ensuring that unscrupulous providers do not enroll ineligible consumers in the program, but it is not enough. USAC has therefore implemented several safeguards at my direction to mitigate waste, fraud and abuse and reduce improper payments in the Lifeline program. USAC now regularly reviews program subscribership to identify and remove: (1) subscribers who list a home address that is also used by an excessive number of other subscribers; (2) deceased subscribers; and (3) subscribers who are otherwise no longer eligible for the program. Since USAC started this process in the fourth quarter of 2017, it has identified over $2.1 million to be recovered from providers and removed over 141,000 ineligible subscribers from the program. Also, in late 2017 and early 2018, USAC made several important changes to its reimbursement system to prevent Lifeline providers from claiming more funding than they are entitled to. Audits are another important piece of improving accountability, and at my direction, USAC is conducting for the first time forensic audits of several Lifeline providers to assess compliance with program rules.

We are also working with the Inspector General's Office to address structural weaknesses in Lifeline that will not be fixed by the National Verifier. For example, at my direction, USAC is developing a new database that will allow it to account for and monitor the registration activity of carrier representatives responsible for enrolling consumers in the program. This database will help USAC and the FCC identify conduct by sales agents and employees who may be attempting to defraud the program.

The bottom line is that the FCC shares your concern and will always aim to prevent and, as appropriate, prosecute those who seek to or do in fact defraud the Universal Service Fund.

2. Chairman Pai you recently laid out a plan to create a new $20.4 billion Rural Digital Opportunity Fund to extend high-speed broadband in rural America. How many individuals currently lack access to broadband in their homes? Can you provide more details about the Rural Digital Opportunity Fund and how you plan to repurpose Universal Service Funds?

Response: Bridging the digital divide has been my top priority since becoming Chairman in 2017. In that time, we've focused on removing barriers to infrastructure, promoting competition, and providing efficient, effective support for rural broadband expansion through our Universal Service Fund programs. As a result of those efforts, the digital divide has narrowed substantially, and more Americans than ever before have access to high-speed broadband. The number of Americans in census blocks wholly lacking at least 25 Mbps/3 Mbps service dropped from 26.1 million at the end of 2016 to 21.3 million at the end of 2017, a decrease of more than 18%.

But more work remains to close the digital divide. That's why I circulated a proposal for the FCC's August Open Meeting to establish the Rural Digital Opportunity Fund, a modernized approach for connecting the hardest-to-serve corners of our country. Building on the success of the CAF Phase II auction, the Rural Digital Opportunity Fund would, as you observed, provide $20.4 billion over ten years to support up to gigabit

service to millions of unserved Americans through a competitive auction. This will ensure that the most unserved Americans will be covered for the lowest cost possible. The Commission adopted the Notice of Proposed Rulemaking addressing the Rural Digital Opportunity Fund on August 1.

3. Last summer, the FCC announced that it was going to take action to address immediate and long-term funding shortages in the Rural Health Care Program. When can we expect that you will take action in a way that gives assurance to providers that they can rely on the program to help get services to rural places in the lower 48 states? If that action is already taking place, please provide the subcommittee with an enumerated list of what is being done.

   Response: As you know, the FCC's Rural Health Care (RHC) Program helps health care providers afford the connectivity that they need to better serve patients. We have taken several steps to extend the program's impact to those who may not otherwise have access to high-quality health care. For instance, we adopted the first increase to the program's budget in a generation. Specifically, in a June 2018 Order, the Commission increased the annual RHC Program funding cap by 43%, to $571 million, starting with FY 2017; adjusted the RHC Program funding cap for inflation, starting in FY 2018; and established a process to carry-forward unused funds from past funding years for use in future funding years. Thanks to these measures, no rural health care providers seeking support from the Rural Health Care Program were capped in FY 2018.

   In order to promote the efficient distribution of limited RHC Program funds, and increase transparency and predictability for Program participants, the Commission adopted a Report and Order at the FCC's August Open Meeting which reformed RHC Program rules. The Report and Order (1) reformed the distribution of RHC funding to promote efficiency and reduced aspects of the Telecommunications (Telecom) Program that encourage waste, fraud, and abuse; (2) streamlined and simplified the calculations of the discounted rates that health care providers pay for communications services and the amount of support received from the program; (3) directed the Program Administrator to create a database of rates that health care providers could use to quickly and easily determine the amount of support they can receive from the Program; (4) targeted funding to the most rural areas and those facing shortages of health care providers and ensured that eligible rural health care providers continue to benefit from program funding in the event that demand for the Program exceeds its funding cap; (5) simplified the application process for Program participants and provided more clarity regarding Program procedures; and (6) directed the Program Administrator to take a variety of actions to increase transparency in the Program and ensure that all applicants receive complete and timely information to help inform their decisions regarding eligible services and purchases.

4. When can we expect to see substantive amounts-- versus piecemeal amounts-- of 2018 Rural Health Care Program monies being released to those states that are in need?

   Response: The Commission has taken steps to ensure that all funding requests seeking support from the Rural Health Care (RHC) Program for services delivered in FY 2018 are funded to their full eligible amounts and are issued as quickly as possible. *First*, pursuant

to the measures adopted by the June 2018 RHC Funding Cap Order, the RHC Program funding cap for FY 2018 was approximately $581 million (as opposed to $400 million when I came into office). *Second*, in October 2018, I announced that all single-year 2018 funding requests would be funded to their full eligible amounts, and the Program Administrator began processing and issuing those funding decisions shortly after. *Third*, on May 14, 2019, the Commission adopted an Order providing full funding for multi-year and upfront payment funding requests for services delivered in FY 2018. Because the total amount of multi-year and upfront demand exceeded the $150 million funding cap on such requests within the Healthcare Connect Fund, absent action by the Commission, USAC would have been required to pro-rate this funding.

To avoid significant reductions in support, the Commission suspended its pro-ration rule for FY 2018 and directed USAC to process the FY 2018 portion of multi-year commitment requests as single-year funding requests and treat the underlying multi-year contracts as evergreen. That action ensured that the health care providers that submitted the request received the full funding they needed for their FY 2018 services and created a path for them to seek the remaining funding requested in subsequent funding years without having to rebid the contracts. Taken together, these decisions ensured that the health care providers could continue to obtain the critical telecommunications and advanced services needed for the delivery of health care services to their rural communities.

5. Regarding the 6 GHz proceeding, the FCC told me in a recent letter that the FCC believes an automated frequency control (AFC) system will prevent interference to utilities and other critical infrastructure. I've been told by energy companies in my state that this technology has not been proven. Has the FCC actually tested this technology and can you vouch that it will work? If not, will you test this system prior to taking final action?

   Response: I've consistently stated that the FCC will ensure that it will protect incumbent systems in the 6 GHz band from harmful interference. To that end, the NPRM proposes an automated frequency control system for the 5.925-6.425 GHz and 6.525-6.875 GHz sub-bands to identify frequencies on which unlicensed devices could operate without causing harmful interference to fixed point-to-point microwave receivers. The Commission has employed automated systems previously to enable sharing of spectrum such as in the TV White Spaces and Citizens Broadband Radio Service. To be sure, this is a complicated proceeding, with the record having only recently closed, so the Commission will conduct a thorough review of the record prior to making any final decision.

6. Regarding the 6 GHz proceeding, energy companies in my state have told me that if there is even a threat to disruption of their communications networks, they will need to consider relocating to another band, which could cost tens of millions. That is assuming it is even feasible to relocate, which is not a given. In the 90s, the FCC compensated utilities when they were forced into the 6 GHz band. I have significant concerns asking Louisiana energy customers to pay for this effort. Since this action may force incumbents out of this band, will you support compensating those who need to relocate to ensure the safety and reliability of the electric grid?

Response: As mentioned above, the Commission will ensure that it will protect incumbent systems in the 6 GHz band from harmful interference. Indeed, it has proposed and is considering rules to ensure interference will not occur. Accordingly, the NPRM does not propose to relocate energy companies to other spectrum bands, and they are not expected to incur any costs under the proposed rules.

7. In Louisiana, the FCC's broadband maps show that a number of communities remain unserved, especially in rural areas. Even worse, the current maps overstate coverage, meaning that many more residents lack broadband, but we don't even know where they are. I believe the FCC should take immediate steps to update its broadband maps with more detailed service area information to identify and spur deployment, through private investment or subsidies like the Rural Digital Opportunity Fund you've announced. Chairman Pai, will you prioritize completing the FCC's proceeding to update its broadband data and maps?

Response: I agree that obtaining and using updated and accurate broadband deployment data is critical to accomplishing the goal of making broadband available to all Americans, regardless of where they live. We need to understand where broadband is available and where it is not to target our efforts and direct funding to areas that are most in need.

That is why the Commission began a top-to-bottom review of our deployment data collection to ensure that broadband data will be more precise, granular, and ultimately useful to the Commission and the public. Along those lines, the Commission adopted a Report and Order on August 1 to create the Digital Opportunity Data Collection, an all-new approach to mapping that would yield more granular and more accurate broadband maps. That Report and Order also provides for regular updates of the filed data to ensure that the maps we rely on are current. I'm also proposing that we verify those maps through crowdsourcing—feedback directly from the public. These updated maps will be used to focus funding to expand broadband through future initiatives such as the second phase of the proposed Rural Digital Opportunity Fund (RDOF).

8. Chairman Pai, I commend your focus on fostering a regulatory environment that encourages ongoing private investment, including in rural America. One issue that has come to my attention is that communities in some parts of the country are imposing additional franchise requirements and fees above and beyond what's allowed under federal law. I'm concerned that these extra fees will discourage broadband deployment in rural areas that are already more costly to serve or make service more expensive for rural residents. Do you share these concerns?

Response: I do. And the Commission adopted rules on August 1 to address this issue. As you know, the Communications Act limits franchise fees to five percent of cable revenues and defines "franchise fee" to include "any tax, fee, or assessment of any kind imposed by a franchising authority or other governmental entity on a cable operator or cable subscriber, or both, solely because of their status as such." 47 U.S.C. § 542(g)(1). In *Montgomery County, Md. et al. v. FCC*, the U.S. Court of Appeals for the Sixth Circuit held that the terms "tax" and "assessment" were broad enough to encompass nonmonetary exactions—such as cable-related, in-kind contributions. 863 F.3d 485, 490-91 (6th Cir. 2017). But the court held that just because the statutory definition of

"franchise fee" *could* include such nonmonetary contributions did not necessarily mean that it *did* include them, and it remanded the issue to the Commission for further consideration. *See id.* at 491-92.

In response to this remand, the Commission unanimously issued its *Second Further Notice of Proposed Rulemaking* to consider the scope of the congressionally-mandated statutory limit on franchise fees. The Commission developed a voluminous record in response to this notice, including numerous submissions from local franchising authorities, providers of public, educational, or governmental (PEG) programming, and cable operators.

And on August 1, the Commission reached the following conclusions. *First*, concluded that cable-related, "in-kind" contributions required by a cable franchising agreement are franchise fees subject to the statutory five percent cap on franchise fees set forth in section 622 of the Communications Act, with limited exceptions, including an exemption for certain capital costs related to PEG channels. *Second*, it found that under the Communications Act, local franchise authorities may not regulate the provision of most non-cable services, including broadband Internet access service, offered over a cable system by an incumbent cable operator. *Third*, it found that the Act preempts any state or local regulation of a cable operator's non-cable services that would impose obligations on franchised cable operators beyond what Title VI of the Communications Act allows. *Finally*, it found that Commission requirements that concern local franchise authority regulation of cable operators should apply to state-level franchising actions and state regulations that impose requirements on local franchising.

This approach, while grounded in legal interpretation of the Communications Act, would have a very real practical impact: freeing up capital that could then be used to build, extend, and/or maintain high-speed broadband networks. This would be particularly helpful in rural areas which, as you observe, are too often unserved or underserved.

Questions for the Record from Senator Boozman

1. When can we expect to see substantive amounts-- versus piecemeal amounts-- of 2018 Rural Health Care Program monies being released to those states that are in need?

   Response: The Commission has taken steps to ensure that all funding requests seeking support from the Rural Health Care (RHC) Program for services delivered in FY 2018 are funded to their full eligible amounts and are issued as quickly as possible. *First*, pursuant to the measures adopted by the June 2018 RHC Funding Cap Order, the RHC Program funding cap for FY 2018 was approximately $581 million (as opposed to $400 million when I came into office). *Second*, in October 2018, I announced that all single-year 2018 funding requests would be funded to their full eligible amounts, and the Program Administrator began processing and issuing those funding decisions shortly after. *Third*, on May 14, 2019, the Commission adopted an Order providing full funding for multi-year and upfront payment funding requests for services delivered in FY 2018. Because the total amount of multi-year and upfront demand exceeded the $150 million funding cap on such requests within the Healthcare Connect Fund, absent action by the Commission, USAC would have been required to pro-rate this funding.

   To avoid significant reductions in support, the Commission suspended its pro-ration rule for FY 2018 and directed USAC to process the FY 2018 portion of multi-year commitment requests as single-year funding requests and treat the underlying multi-year contracts as evergreen. That action ensured that the health care providers that submitted the request received the full funding they needed for their FY 2018 services and created a path for them to seek the remaining funding requested in subsequent funding years without having to rebid the contracts. Taken together, these actions ensured that the health care providers could continue to obtain the critical telecommunications and advanced services needed for the delivery of health care services to their rural communities.

2. Last summer, the FCC announced that it was going to take action to address immediate and long-term funding shortages in the Rural Health Care Program. When can we expect that you will take action in a way that gives assurance to providers that they can rely on the program to help get services to rural places in the lower 48 states? If that action is already taking place, please provide the subcommittee with an enumerated list of what is being done.

   Response: The Rural Health Care (RHC) Program helps health care providers afford the connectivity that they need to better serve patients, and we have taken several actions to address a significant increase for Program funds in recent years, as well as to make the distribution of funds more efficient and equitable. For instance, in a June 2018 Order, the Commission increased the annual RHC Program funding cap by 43%, to $571 million, starting with FY 2017, adjusted the RHC Program funding cap for inflation, starting in FY 2018 and established a process to carry-forward unused funds from past funding years for use in future funding years. Thanks to these measures, no rural health care providers seeking support from the Rural Health Care Program were capped in FY 2018.

With an eye on the future, and in order to promote the efficient distribution of limited RHC Program funds and increase transparency and predictability for Program participants, the Commission adopted a Report and Order at the FCC's August Open Meeting to reform RHC Program rules. The Report and Order (1) reformed the distribution of RHC funding to promote efficiency and reduced incentives in the Telecommunications (Telecom) Program that encourage waste, fraud, and abuse, (2) streamlined and simplified the calculations of way the discounted rates that health care providers pay for communications services and the amount of support received from the Program; (3) directed the Program Administrator to create a database of rates that health care providers could use to quickly and easily determine the amount of support they can receive from the Program; (4) targeted funding to the most rural areas and those facing shortages of health care providers and ensured that eligible rural health care providers continue to benefit from Program funding in the event that demand for the Program exceeds its funding cap; (5) simplified the application process for Program participants and provide more clarity regarding Program procedures; and (6) directed the Program Administrator to take a variety of actions to increase transparency in the Program and ensured that all applicants receive complete and timely information to help inform their decisions regarding eligible services and purchases.

Questions for the Record from Senator Jerry Moran:

1. Your testimony indicated that the FCC was "applying lessons learned from the Connect America Fund Phase II reverse auction" in establishing the recently announced $20.4 billion Rural Digital Opportunity Fund. Would you please describe what these "lessons" are? How will the FCC propose to account for them in the rulemaking setting up the fund?

   Response: Among the lessons learned from the CAF Phase II auction—lessons we hope to apply in the context of the Rural Digital Opportunity Fund—are that the mechanism of a reverse auction, with the intramodal competition that mechanism allows, is a much more efficient system for distributing funding. Similarly, "weighting" CAF Phase II bids so that proposals to offer higher-speed, lower-latency services were given a leg-up over lower-speed, higher-latency bids proved to be successful, which over 99% of households to be covered in that auction served with speeds of at least 25/3 Mbps, most served with speeds of at least 100 Mbps, and many served with gigabit speeds.

2. I support the FCC's efforts to verify that broadband network supported by the Universal Service Fund (USF) are meeting program requirements through their performance testing proposal. However, testing protocols need to be structured reasonably while taking into account the technical, administrative, and financial challenges posed to small carriers reliant on USF support. Please provide an update on the FCC's work to implement these performance testing requirement. Are there currently testing solutions available for USF participants that would not require customers installing new equipment in their homes?

   a. Also, what is the expected timeline for implementation?

   Response: As you note, performance measures are critical to ensuring that consumers receive the level of service that providers have committed to deploy thanks in part to universal service high-cost support. Under an order the FCC adopted in July 2018, carriers subject to performance measures were required to begin testing in the third and fourth quarters of 2019 and report these results with an accompanying certification by July 1, 2020.

   However, in order to implement the testing regime, the Commission needs to develop a mechanism for collecting the testing data and obtain Paperwork Reduction Act (PRA) approval. In addition, several petitions for reconsideration and applications for review were filed regarding the July 2018 order. In light of the issues raised in these filings, the need for additional technical development of the interfaces required, and the requirement for PRA approval, the Wireline Competition Bureau issued a public notice on May 20, 2019 delaying the requirement to begin testing and reporting of speed and latency results until the first quarter of 2020. The July 2018 order gives service providers the flexibility to use software solutions. However, one issue raised in the various filings was that testing solutions that can use existing customer premise equipment, such as cable modems and gateways, was not widely available. Since that time, some service providers and software vendors have told the Commission that these software solutions are increasingly available for many service providers. Commission staff are reviewing these

filings and will continue to work to ensure that performance testing measures accommodate service providers of all sizes and capabilities.

3. Your testimony covered the creation of the Office of Economics and Analytics. Would you please describe the FCC's plans to "expand and deepen" the use of economic analysis in its upcoming decision-making?

    a. In terms of rulemakings and auctions, what does coordination between the Office of Economics and Analytics and the other Bureaus and Offices look like? What are the resource-based needs of these coordination efforts?

Response: The FCC officially launched the Office of Economics and Analytics (OEA) in December 2018 after receiving approval for the reorganization from your subcommittee. Among its primary goals, OEA is elevating rigorous, objective economic analysis throughout the FCC in order to better inform policymaking.

Generally speaking, OEA provides input to the FCC's Bureaus and Offices on all matters with significant economic content through all stages of the rulemaking process. For example, OEA contributes to options memos, prepares questions for NPRMs, and conducts economic analysis for an Order. In accordance with the rules the Commission adopted when it established OEA, the Economic Analysis Division (EAD) within OEA performs an independent economic review of all Commission-level rulemakings. EAD also reviews other Commission-level items and lends its expertise and suggestions as appropriate. As of July 1, 2019, EAD had reviewed over 150 Commission-level items, including proceedings from every Bureau within the FCC. The extent of the economic review in these cases typically depends on the estimated economic impact of the action. Items with over $100 million in estimated annual effect on the economy must receive a rigorous economically-grounded cost-benefit analysis. To date, two items have crossed this threshold.

Similarly, Auctions Division attorneys and economists coordinate with the relevant Bureaus early in the rulemaking process. Auctions staff meet with Bureaus as soon as an auction or competitive bidding process is contemplated to provide expertise on designing and implementing efficient competitive bidding. The Auctions Division and other OEA economists are deeply involved in the design and implementation of auctions, including creating the legal documents, producing intricate auction timelines, providing contractor oversight, and conducting and closing of an auction. The coordination efforts take place through meetings, emails, and planning documents.

OEA also provides economic support, as needed, for other types of work produced by the Bureaus and Offices, such as merger review and enforcement actions. The level of analytic support ranges from answering discrete economic questions posed by FCC staff, to embedding economic experts throughout a proceeding. At the start of Commission-level proceedings, OEA and the relevant Bureau/Office meet to jointly define work product and responsibilities, develop a communications plan, discuss timing and prioritization, and determine the necessary review processes. Every Bureau and Office has a designated person in the OEA front office for coordination of this process. Most of OEA's economic and analytic work is concentrated in EAD and the Industry Analysis Division.

OEA also is responsible for designing and implementing FCC auctions; developing and implementing consistent and effective agency-wide data, collections, practices, and policies; and conducting long-term economic and analytical research related to communications policies to inform future rule-makings. Centralizing the FCC's economic functions into one office has contributed to a culture in which economists and others focused on economic functions work and collaborate effectively to perform independent economic analysis that informs the Commission's policymaking decisions. In addition, OEA has issued two economic white papers in the past six months—the first two whitepapers that the FCC has issued since 2012.

No additional resources were requested for coordination within the Agency at this time.

4. Last Congress, I was successful in enacting the FCC CIO Parity Act, which requires the FCC to ensure that the agency's Chief Information Officer (CIO) has a significant role in the budgeting, programming, and hiring decisions of the agency. Given the CIO's subject matter expertise, prioritizing the replacement of costly and vulnerable legacy IT systems would be accounted for in this critical decision-making. Did the agency's CIO have a significant role in the development of the President's FY2020 budget request?

    a. Were any specific "legacy" IT systems prioritized for replacement as a result?

Response: Thank you for your leadership in elevating the Chief Information Officer's (CIO) role within all agencies. At the FCC, our CIO is an essential and valued member of the Office of Managing Director team and has significant responsibility for developing Information Technology (IT) planning, budgeting and office hiring. The CIO had a significant role in the development of the President's FY 2020 budget request.

The current acting CIO and his predecessor have focused all available resources on following through with the replacement of legacy systems and modernization of our systems. The Commission's FY20 Budget CJ, at pages 19-21, provides the current focus on IT modernization. Importantly, IT system upgrades and replacement account for the entire new investments section of our request at $3.19M.

The CIO and FCC IT Team have worked closely with the Commission's Bureau and Office leadership to prioritize modernization efforts in the areas that will benefit most from replacement of the legacy systems. Specific IT systems prioritized for replacement include: Integrated Spectrum Auction System (ISAS), International Bureau Filing System (IBFS), Universal Licensing System (ULS), Disaster Information Reporting System (DIRS), and the OET Frequency Assignment Coordination System (OFACS).

5. Your testimony acknowledges the importance of making more spectrum available for unlicensed operations. Would you please describe the role that innovative technologies and sharing techniques play in increasing spectrum access for unlicensed operations?

    a. As the Chairman of the CJS Appropriations Subcommittee, I remain interested in the research and development taking place at the Institute for Telecommunication Sciences, the primary engineering arm of NTIA. Does the work taking place at the Institute assist the FCC with its decision-making around unlicensed operations?

Response: Unlicensed devices typically share spectrum with other services on a non-interference basis. The Commission has adopted provisions to enable unlicensed devices to share spectrum using advanced sharing techniques to prevent harmful interference to incumbent services. For example, unlicensed devices were provided access to the TV White Spaces and the Citizens Broadband Radio Service (CBRS) by developing data bases of protected operations that would be avoided by the unlicensed devices. We have worked closely with the Institute of Telecommunication Sciences (ITS) in testing the CBRS data bases and we have a long history of working collaboratively with ITS on advanced spectrum sharing techniques for both licensed and unlicensed services.

Questions for the Record from Senator Daines:

1. I recently wrote a letter to the Commission along with my colleague, Sen. Johnson, regarding TV White Spaces technology and the need for the Commission finalize two outstanding rules. Thank you for taking action and providing certainty on those rules. There are still more issues to be resolved (such as enabling connected school buses and advancing IoT like precision agriculture). Can you give me an update on the outstanding rules regarding TV White Space and are you able to conclude those issues by the end of the year?

   Response: I appreciate your ongoing interest in the Commission's TV White Spaces rules. As you are aware, earlier this year, the Commission adopted several revisions to its white spaces rules. These revisions improved the white space database unlicensed users rely on when accessing unused spectrum in the TV bands and modified technical rules to permit use of higher antennas in rural areas to enable greater coverage when providing broadband services.

   On May 3, 2019, Microsoft filed a petition for rulemaking requesting that the Commission further modify the rules for white space devices. Specifically, it requested that the Commission provide additional technical modifications to its rules to permit: (1) higher antenna power limits and heights for certain unlicensed devices; (2) more intensive use of unused spectrum where doing so would not cause harmful interference to licensed users; (3) further adjustments to the rules to support the use of white space channels for narrowband IoT; and (4) unlicensed white space device operations on movable platforms (such as tractors used for precision agriculture or school buses for connected services).

   The Commission released a public notice on May 9, 2019, seeking comment on the Microsoft petition. Comments were due on June 10, 2019, and reply comments were due on June 25, 2019. Sixteen parties filed comments and three parties filed reply comments. The comments were generally supportive, although some parties, such as wireless microphone manufacturers and broadcasters, expressed certain concerns.

   At this stage, our staff is reviewing the comments carefully. We will move forward once we have properly considered all of the comments and addressed the issues raised by the stakeholders.

2. Now more than ever, kids and parents deserve a safe place to access educational and entertainment content. There have been rules governing traditional media markets regarding advertising during children's program for decades, but little if anything when they are online. It has become imperative that we update our privacy laws to ensure our children's safety, which is why I introduced the SAFE KIDS Act that prevents websites used primarily for preK-12 purposes from collecting or using student data. I believe that it is important that we modernize children's television advertising rules to balance current trends while maintaining a safe space for children to watch educational and entertainment programs. Chairman Pai, will you commit to working with all stakeholders to modernize children's television advertising rules?

Response: As a general matter, I support modernizing our rules, within statutory constraints, to reflect today's market and technology. I am willing to work with all stakeholders to explore whether changes to the children's television advertising rules make sense.

3. The IP Caption Telephone Service (IP CTS) has enabled the hard of hearing community, and specifically certain veterans, to be more independent and integrate into the workforce. It is my understanding that the FCC is currently undergoing updates to the program and I want to make sure that any updates are balanced, well informed and broadly supported by the affected community. I believe that any updates should not result in an inferior service, specifically in regards to the automated speech recognition and access to equipment. Chairman Pai, will you commit to do additional studies on any proposed updates and work with all affected groups to ensure any existing concerns are addressed?

   Response: I agree that IP CTS is a critical service for individuals with hearing loss. The vast majority of captioned telephone services already rely on automated speech recognition (ASR). However, those services previously have required the interposition of a communications assistant between the caller and the speech recognition software to "revoice" a caller's words. This interposition slows transcription, reduces the privacy of calls for callers, and increases the costs of IP CTS.

   That's why the Commission took steps to modernize IP CTS in June 2018 by authorizing the use of ASR without a communications assistant. We found that ASR has become a viable alternative with its improvements in accuracy, speed, and privacy–especially compared to services that require the interposition of a communications assistant. And the Commission found that consumers will continue to be able to select a provider based on quality of service and available methods, as ASR will not be the sole means of offering IP CTS.

   Additionally, I want to stress that nothing regarding our reforms allows substandard service: Providers using ASR must continue to meet the Commission's minimum Telecommunications Relay Service standards and report data to the Commission to help us determine if further measures are necessary.

Questions for the Record from Vice Chairman Leahy

You have claimed that, following the repeal of net neutrality protections, there would be a boom in private investment. During your last appearance before the Subcommittee, I asked you to provide specific data to show exactly how this would benefit unserved rural communities in Vermont. At the time, you declined to provide that information. Now that net neutrality has been repealed for more than a full year, I expect that you will be able to provide my constituents in Vermont with evidence showing exactly how much this supposed boom in private investment in broadband networks has benefitted them.

1. How many unserved Vermonters have gained access to service due solely to private investment, excluding investments made as part of government programs like the Connect America Fund?

2. How many Vermonters have seen their broadband bill reduced compared to their December 2017 bill?

Response (to Questions 1 and 2): Our deregulatory approach, including the restoration of the bipartisan, light-touch approach to Internet regulation reflected in the *Restoring Internet Freedom Order*, has helped increase broadband infrastructure investment in the United States and close the digital divide.

In 2018, for example, fiber was deployed to more new homes in the United States than any year ever. Investment in broadband networks increased by $3 billion, the second straight year of increased investment, which followed two years of declining investment at the end of the prior Administration. And the number of wireless small cells in the United States deployed more than quadrupled in 2018. Turning to Vermont, I would refer to a letter written to you from Dr. Michel Guite, the Chairman and CEO of Vermont Telephone and VTel Wireless ("VTel"), on May 25, 2018. In that letter, Dr. Guite wrote: "As far as net neutrality is concerned, . . . I can assure that regulating broadband like legacy telephone service would not create any incentives for VTel to invest in its broadband network. In fact, it would have precisely the opposite effect." He continued, "[y]ou asked Chairman Pai to give tangible examples of investment in rural broadband as a result of recent FCC policies. I can tell you that, just days ago, VTel committed $4 million to purchase equipment and services from Ericsson to upgrade its 4G LTE core to enable voice roaming and Wi-Fi calling to all our Vermont rural subscribers and to simultaneously begin rolling out faster mobile broadband that will start our transition to 5G. This commitment represents VTel's largest single technology investment since the capital invested in connection with VTel's ARRA awards, and one of the largest in the history of our company." He further stated that "[t]he FCC under Chairman Pai's leadership has created a positive regulatory climate to make such investments," and concluded, "VTel is quite optimistic about the future, and the current FCC is a significant reason for our optimism." For your convenience, I have attached to this document a copy of the letter from Dr. Guite.

Despite the positive strides we have seen over the last two-and-a-half years, our work to close the digital divide is not complete. This will remain our top priority as we continue our efforts to help deliver the benefits of broadband to all Americans.

Questions for the Record from Senator Manchin

1. Public Feedback Mechanism

As long as we continue to rely solely on carrier-reported Form 477 data to tell us where there is and isn't coverage of fixed and mobile broadband, we will never have a complete picture that accurately depicts the real-world experiences of Americans.

- Will a "public feedback mechanism" be considered within the ongoing Form 477 proceeding?

- Do you need new legislative authorities to consider and implement a "public feedback mechanism" or could you do that already?

Response: I agree that using updated and accurate broadband deployment data is critical to accomplishing the goal of making broadband available to all Americans, regardless of where they live. We need to understand where broadband is available and where it is not to target our efforts and direct funding to areas that are most in need. That is why the Commission began a top-to-bottom review of our deployment data collection to ensure that broadband data will be more precise, granular, and ultimately useful to the Commission and the public.

The Commission voted affirmatively on August 1 on a Report and Order I circulated which would yield more granular and more accurate broadband maps. It also provides for regular updates of the filed data to ensure that the maps we rely on are current. Consistent with our current authorities, the Report and Order also enables third-party verification through crowdsourcing—feedback directly from the public.

2. Mobility Fund Phase II

It has been exactly 5 months since your agency put a hold on Mobility Fund Phase II. My state desperately needs this funding.

- Do you have any idea when you plan to move forward with it?

- Do you believe we will have to start this entire process over again?

Response: In December 2018, the Commission launched an investigation into whether one or more major carriers violated the MF-II reverse auction mapping rules and submitted incorrect coverage maps. The Commission has suspended the next step of the challenge process—the opening of a response window—pending the conclusion of this investigation, which we are actively working on. I expect Commission staff will be able to wrap up their investigation in the near term.

3. Rural Digital Opportunity Fund

Last month as part of your "5G Fast Plan", you announced the establishment of a $20.4 billion fund designated for rural broadband investment called the Rural Digital

Opportunity Fund. While this announcement signals a positive step forward in bridging the digital divide, unless we fix our broadband coverage maps and ensure this new program has a dedicated amount set aside for places with mountainous terrain, I am concerned West Virginia will not see a dime of this funding.

- I understand that your agency just opened a new docket for the Rural Digital Opportunity Fund so it will take some time to go through the regulatory process at the FCC but how do you envision this proposal will help my state and when do you think it will begin?

- Can you commit to including a terrain factor or set aside within this program so that places like West Virginia have a fair shot at this funding when it is made available?

Response: On August 1, the Commission adopted a Notice of Proposed Rulemaking proposing to establish the Rural Digital Opportunity Fund (RDOF). This modernized approach for connecting the hardest-to-serve corners of our country will be the biggest step yet the Commission has taken to close the digital divide, including the gaps I've seen for myself in West Virginia.

Building on the success of the CAF Phase II auction, the RDOF would provide more than $20 billion to support up to gigabit service to millions of unserved Americans through a competitive auction. This will ensure that the most unserved Americans will be covered for the lowest cost possible. The RDOF would target support to areas that lack access to fixed voice and 25/3 Mbps broadband and would be implemented through a two-phase approach.

Phase I would allocate support to wholly unserved census blocks and Phase II would allocate support to unserved locations in partially unserved census blocks, along with areas not won in Phase I. The RDOF NPRM proposes to use the Connect America Cost Model to set reserve prices (as the Commission did with the CAF II auction). The model accounts for variations in cost due to terrain and soil conditions and are reflected in the reserve price.

In addition, to encourage the deployment of higher speed services and recognizing that terrestrial fixed networks may serve as a backbone for 5G deployments, the weights proposed for different performance tiers in the RDOF NPRM favor gigabit-speed, low latency services.

Our aim is to commence Phase I of the auction next year.

4. Remote Areas Fund

You have stated that your agency plans to move forward with the Remote Areas Fund no later than one year after the commencement of the Connect America Fund II Auction which occurred in July of last year**.**

- July is only a few short months away, are you still planning to move forward with the Remote Areas Fund?

- Can you identify which areas in my state are likely to be eligible for this funding?

Response: The item adopted at the FCC's August Open Meeting proposing to establish the Rural Digital Opportunity Fund (RDOF) seeks comment on a budget of at least $20.4 billion over the next decade to support up to gigabit service to millions of unserved Americans through a competitive auction. As in the CAF Phase II auction, we propose to include both high-cost locations and extremely-high cost locations in the RDOF auction. Most of the areas that did not receive winning bids in the CAF Phase II auction were high-cost areas, and not extremely high-cost ones. Because it would be inefficient to conduct a separate Remote Areas Fund (RAF) auction for so few locations, we propose to make the areas from the CAF Phase II auction that did not attract bids, which could have been part of the RAF, eligible for the RDOF auction, and to make available the amount of funding the Commission once envisioned for the RAF (at least $100 million per year) part of the RDOF budget.

5. N11 Suicide Hotline for Veterans

The National Suicide Hotline Improvement Act of 2018 (P.L. 115-233), which was signed into law on August 18th, 2018, requires the Federal Communications Commission, in consultation with the Secretary of the Veterans Affairs, to complete a study on the effectiveness of an N11 dialing code for Veterans in crisis no later than August 2019.

- What is your most recent update on the progress of the aforementioned feasibility study for establishing an N11 dialing code for Veterans in crisis?

- What is your timeline for completion of this study?

- What outreach efforts have you conducted to date and planned in the future to ensure that a representative sample of Veterans, providers, and other relevant stakeholders have a voice in this process?

- What has the Secretary of Veterans Affairs provided you to complete this study? Please provide any documentation from the VA that has contributed to this study?

- What is the earliest date that you could implement a three-digit dialing number for Veterans in crisis?

Response: As you note, the Act directs the Commission to coordinate with the Department of Veterans Affairs (VA), as well as the Department of Health and Human Services' Substance Abuse and Mental Health Services Administration (SAMHSA), and the North American Numbering Council (NANC) in conducting a study examining the feasibility of designating a simple, easy-to-remember, three-digit dialing code to be used for a national suicide prevention and mental health crisis hotline system.

The Commission's Wireline Competition Bureau issued two Public Notices seeking input from interested stakeholders on the issues that we must address in the study and the report required by the statute. In accordance with the statute, the Commission is also

working closely with the VA, as well as SAMHSA, and the NANC as we carefully examine this important issue. The VA and SAMHSA conducted studies and provided reports to the Commission in early February 2019, and the NANC submitted its report in May.

Commission staff is reviewing these reports, as well as comments filed by interested parties in the record, including veterans and family members of veterans. I personally have met with various stakeholders, including Utah Congressman Chris Stewart, the Trevor Project, and the American Foundation for Suicide Prevention, to hear their views.

We will submit our report to Congress by the statutory deadline of August 14, 2019. Consistent with Congress' directive, the report will recommend whether a particular three-digit dialing code should be used for a nationwide suicide prevention and mental health crisis system. Before implementing any such recommendation, we would seek public input through a notice and comment proceeding. Interested parties, including veterans and veterans' organizations, would be invited to fully participate in that proceeding. Per your request, I've attached the VA Report to this response.

The supporting documentation is attached to this document at Appendix A.

6. EBS Spectrum

On April 30th, 57 rural operators across 22 states including West Virginia filed a letter to the FCC stating that Educational Broadband Service (EBS) is critical to their ability to build out broadband networks in the rural areas they serve. They stated support for your plan to give educational entities the first priority to apply for an EBS license and enter into a lease with these rural operators.

- Are you still planning to give educational entities first priority to obtain an EBS license and allowing educators the chance to partner with rural operators?

Response: On July 10, 2019, the Commission adopted a Report and Order that establishes a plan to leverage this vital mid-band spectrum both to provide wireless broadband, including 5G, and to help close the digital divide across rural America. The Report and Order does not adopt the proposal in the NPRM of providing a priority window for educational entities, as the Commission concluded that making the unassigned EBS spectrum available for flexible use is the best way to facilitate the rapid deployment of wireless broadband services, including 5G, to the public. We were informed in part by experience; today, this valuable public resource of 2.5 GHz spectrum is dramatically underused, especially west of the Mississippi River. And the overwhelming number of EBS licensees do not provide services themselves but rather lease spectrum to wireless carriers. The funds they accrue may not necessarily benefit schoolchildren. Indeed, as Commissioner Carr mentioned when the item was adopted, "In the course of examining the 2.5 GHz licenses at issue in this order, I discovered that many of these national organizations are using this valuable public spectrum that they got for free for activities far removed from kids and schools. . . . I am glad my colleagues agreed to include language in today's decision that directs the Enforcement Bureau and the Wireless Telecommunications Bureau to review these existing license holders for compliance with our rules and other applicable laws."

7. 5G in Rural America

You recently unveiled your "5G Fast Plan" and while this new technology has the potential to yield significant economic benefits, expand consumer services and ignite innovation beyond our wildest dreams, I am concerned that much like the 3G and 4G technologies that have come before it, rural states like mine will not see this new 5G technology deployed to their area.

- How do we ensure rural Americans are not left behind and will have access to this new technology?

Response: Bridging the digital divide is the top priority for the Commission, and we are working in many ways to ensure that we meet our statutory directive to make available, so far as possible, communications services in rural America.

That ethos extends to 5G. 5G-based technologies, both fixed and mobile wireless, will play a major role in connecting rural Americans. One of the most critical steps that the FCC can take is to approve the T-Mobile/Sprint transaction. Right now, Sprint has tremendous mid-band spectrum resources. But the record before the FCC makes clear that the company standing alone does not have the capability to deploy 5G in this spectrum throughout large parts of rural America. On the other hand, if the T-Mobile/Sprint transaction is approved, the combined company has committed to the FCC that they will deploy mid-band 5G to 88% of our nation's population, including two-third of rural Americans. And there would be significant financial penalties if these commitments were not met.

Another way to ensure that rural Americans benefit from these technologies is to get more spectrum into the commercial marketplace—whether high-band spectrum (like 24 GHz), mid-band spectrum (like 2.5 GHz), or low-band spectrum (like 1675 MHz). Yet another way is to ensure that regulatory barriers to infrastructure deployment are low. This means streamlining the process for deploying small cells. This means ensuring that fiber deployment in rural areas is as appealing a prospect as possible to private sector companies. And this means that the FCC's Universal Service Fund—particularly its Rural Digital Opportunity Fund initiative, which will devote over $20 billion toward high-speed rural connectivity—helps support wireline networks critical for rural backhaul. I recognize that the business case for deployment in rural America is often difficult, if not impossible, to build. That's why I'm committed to modernizing our rules, and supporting legislative efforts to help us to do the same—the harder our rules make it to deploy 5G in rural areas, the less likely rural Americans will benefit from the faster speeds, lower latency, and next-generation services 5G could offer.

8. Robo-Calls

- Do you believe opening a robocall enforcement division within the FCC could be a viable step toward combating the scourge of unwanted robocalls?

Response: The Commission's Enforcement Bureau already has a division focused on robocalls. It's called the Telecommunications Consumers Division. It aggressively

enforces the Telephone Consumer Protection Act and the Truth in Caller ID Act, and is responsible for over $200 million in fines against robocallers and Caller ID spoofers since 2017.

Questions for the Record from Senator Van Hollen

1. Congress granted local and state governments the ability to require cable operators to provide monetary franchise fees, and public, educational, and government (PEG) access channels. In a recent proceeding, the FCC proposed permitting cable operators to determine the fair market value of PEG channels and deduct the value of these PEG channels, as well as any broadband and video services provided to schools and senior discounts, from the monetary franchise fee payments.[2] In his accompanying statement, Commissioner O'Rielly states that current law is "vastly anachronistic," and seems to suggest that the FCC should update regulations to reflect the current marketplace, and that Congress may then follow his lead, stating "some of these actions may require alterations of law, but doing so would provide a pathway for Congress to consider the same, if it was so inclined."[3]

   If you adopt this proposal, I am told the estimated losses in franchise fees in my Maryland communities could be as high as 70% and runs into the tens of millions of dollars. No less than 32 Members of Congress – 14 Senators, including my colleague Senator Cardin, and 18 members of the House have voiced their objections to this proposal that upends more than 35 years of cable franchise rules and relations.

   - Due to the strong opposition against this rule, will the Commission consider tabling this proceeding?

   - Will you include a cost benefit analysis in this rulemaking that weights the impact this will have on local communities versus the marginal benefit to cable providers?

   - Do you have evidence in the record that demonstrates that changing the interpretation of the law will have a positive impact on broadband deployment, particularly in rural areas?

   Response: On August 1, the Commission adopted an item to resolve the pending rulemaking and to faithfully implement the law that Congress has set forth. As you know, the pending proceeding is a direct result of a 2017 remand by the U.S. Court of Appeals for the Sixth Circuit in *Montgomery County, Md., et al v. FCC.* As a result of the remand, the Commission was obligated to take another look at how to interpret the definition of "franchise fees" in Section 622 of the Communications Act (47 U.S.C. § 542). Specifically, the court directed the Commission to review how non-monetary ("in-kind") contributions, such as those related to PEG channels, fit within the statutory definition.

[2] *In re Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992* (September 25, 2018)(FCC 18-131) ("Cable In-Kind/Offset FNPRM").

[3] *Id.* at page 37.

The Commission has a duty to implement the statute, and that is what it did on August 1. The relevant statute defines a "franchise fee" to include "*any* tax, fee, or assessment *of any kind*."[1] It then sets forth two exceptions to that definition related to PEG channels. For franchises in effect back in 1984, when the statute was passed, there is a broad exemption for "payments which are required by the franchise to be made by the cable operator during the term of such franchise for, or in support or the use of, public, educational, or government access facilities."[2] But for franchises granted later, the exemption is much narrower, covering only "capital costs which are required by the franchise to be incurred by the cable operator for public, educational, or governmental access facilities."[3]

This legal framework tells us two things. First, given these specific exemptions, the five percent cap (and associated franchise fee definition) does not include a general exemption from cable-related, in-kind contributions. Congress could have—but did not—create one. And the specific exemptions would be unnecessary if there were such a general exemption. The Supreme Court has made clear that it is "'reluctan[t] to treat statutory terms as surplusage' in any setting."[4] We took the same approach.

Second, with respect to post-1984 franchises, capital costs are the only PEG costs that are exempt from the definition of franchise fees. The broader exemption by its plain terms only applies to franchises in existence back in 1984. Congress was therefore aware of the distinction between existing and post-1984 franchises when it established these exemptions, and the Commission does not have the authority to rewrite the statute to expand the narrower, post-1984 one. Congress, on the other hand, is free to do so.

From a policy perspective, I believe that the steps we took on August 1 are good for American consumers. That's because costs imposed by LFAs through in-kind contributions and fees imposed on broadband Internet access service get passed on to consumers. Evidence in the record suggests that every dollar paid in fees beyond the statutory cap is a dollar that cannot and will not be invested in upgrading and expanding networks. For example, comments in the record from small and mid-sized cable operators indicate that requests for in-kind contributions from local franchising authorities have a direct impact on their ability to invest in broadband deployment. *See Ex Parte from Small and Mid-Sized Cable Operators*, MB Docket No. 05-311 (Feb. 4, 2019). This discourages the deployment of new services like faster home broadband or better Wi-Fi or Internet of Things networks.

2. In 2017, the FCC eliminated requirements put in place under the Obama Administration that wireless companies acquiring spectrum likely to be used for 5G networks (called millimeter wave spectrum) have cybersecurity plans to ensure the security of communications over their networks that use public airwaves. Hackers of any company or entity that is beholden to foreign governments are always improving their ability to break into our digital infrastructure. Yet the computer systems running our satellites

[1] 47 U.S.C. § 542(g)(1) (emphasis added).
[2] 47 U.S.C. § 542(g)(2)(B).
[3] 47 U.S.C. § 542(g)(2)(C).
[4] *Duncan v. Walker*, 533 U.S. 167, 174 (2001), quoting *Babbitt v. Sweet Home Chapter, Communities for Great Ore.*, 515 U.S. 687, 698 (1995).

haven't kept up, making them prime targets for an attack. This makes our space assets a massive vulnerability—and it could get much worse if we're not careful. This past weekend, SpaceX won approval from the Federal Communications Commission to increase the number of low-flying satellites as part of its Starlink project so that they can provide faster Internet access to the world. Unfortunately, access will be faster for both legitimate users and hackers alike. The FCC does not require applicants to publicly demonstrate how they will secure these satellites or the Internet they plan to provide. SpaceX, like other private space companies, has shared virtually no information about its cybersecurity efforts or plans. This is extremely troubling considering the potential harm caused by a satellite being hacked. As experts have pointed out, the most mundane outcome is that the satellite will no longer function, but the other extreme is for an attacker to break into a satellite and take over any thrusters (which SpaceX has insisted its satellites will have) and then propel the satellite into critical infrastructure and military satellites in other orbits. In other words, attackers could possibly use the hacked satellite as a kinetic weapon.

- Chairman Pai, with FCC eliminating these rules, what are your alternative plans to address these huge risks of hackers and malicious entities from gaining power, access, and control inside our telecommunications networks?

- What specific measures is the FCC taking go address ensure these systems are secure?

Response: Threats to the nation's communications infrastructure have been a long-standing concern for U.S. government officials. The Department of Homeland Security's Cybersecurity and Infrastructure Security Agency (CISA) has the lead role for overseeing the cybersecurity of our nation's communications networks. The FCC generally and I personally have supported CISA's efforts in this area. Among other things, the Commission serves as a member of the Department of Homeland Security's Information and Communications Technology Supply Chain Risk Management Task Force. It also participates in interagency meetings regarding the implementation of May 2019 Executive Order on Securing the Information and Communications Technology and Services Supply Chain.

In addition, we have acted within the scope of our authority to advance the important values of security. For example, last year the Commission sought comment on whether to require encryption for telemetry, tracking, and command communications for satellites with propulsion capabilities. In a separate item last year, the Commission also proposed to prohibit universal service funding from being used to purchase equipment or services from any company that poses a threat to the national security of our communications networks or the communications supply chain. Most recently, in May 2019, the Commission denied China Mobile USA's application to provide telecommunications services between the United States and foreign destinations.

In addition, I have interacted with numerous foreign government counterparts to express the views of the United States government with respect to the security of communications networks. For instance, this past May, I was part of the United States delegation to an international conference on 5G network security hosted by the Czech Republic, where

there was a broad consensus that the "security of 5G networks is crucial for national security, economic security and other national interests and global stability." And earlier this month, at the 7th Congreso Latinoamericano de Telecommunicaciones in Argentina, I reminded the attendees that, "when making decisions that affect 5G security, we need to remember that the implications are wide-ranging. 5G will affect our militaries, our industries, our critical infrastructure, and much more."

3. Chairman Pai, in April you released a public notice proposing a rechartering of the Communications Security, Reliability, and Interoperability Council or CSRIC (pronounced CIZRIC). Currently the CSRIC provides recommendations to the FCC to ensure, among other things, optimal security and reliability of communications systems, including telecommunications, media, and public safety. However, it is unclear what CSRIC's mission will be under this reorganization.

    - Please indicate where you will make 5G security and cybersecurity a priority for CSRIC and what standards for such cybersecurity, if any, they will be asked to apply.

    Response: The Commission received recommendations from CSRIC VI on 5G security in its September and December 2018 reports, and 5G security will remain a top priority for CSRIC VII. I have directed CSRIC VII to address issues related to 5G security, with a focus on managing security risk in the transition to 5G and in emerging 5G implementations. More information about CSRIC VII is available on the CSRIC VII website: https://www.fcc.gov/about-fcc/advisory-committees/communications-security-reliability-and-interoperability-council-vii.

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C.20554

June 26, 2019

The Honorable Frank Pallone
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Pallone:

Enclosed please find Chairman Pai's responses to the Questions for the Record from the May 15, 2019, hearing on Accountability and Oversight of the Federal Communications Commission.

Please let me know if I can be of any further assistance.

Sincerely,

Timothy B. Strachan,
Director

Enclosure

cc:

The Honorable Greg Walden
Ranking Member
Committee on Energy and Commerce

The Honorable Mike Doyle
Chairman
Subcommittee on Communications and Technology
Committee on Energy and Commerce

The Honorable Robert E. Latta
Ranking Member
Subcommittee on Communications and Technology
Committee on Energy and Commerce

Attachment—Additional Questions for the Record

Subcommittee on Communications and Technology

Hearing on
"Accountability and Oversight of the Federal Communications Commission"

May 15, 2019

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Anna G. Eshoo (D-CA)

1. The FCC has identified combatting robocalls as a top priority. However, Americans are still getting five billion robocalls per month, and they are the top consumer complaint at the FCC. Have you considered reorganizing the FCC to prioritize this top consumer issue by creating a division focused on robocalls?

    a. If so, when will you take such an action?

    b. If not, why not?

    Response: The Commission's Enforcement Bureau already has a division focused on robocalls. It's called the Telecommunications Consumers Division, and it aggressively enforces the Telephone Consumer Protection Act and the Truth in Caller ID Act with over $200 million in fines against robocallers and Caller ID spoofers since 2017.

2. On what date did the FCC's Enforcement Bureau begin its investigation into the sale of geolocation data by wireless carriers or related third-party companies?

    a. When does the FCC expect to announce decisions related to this enforcement action? Will these actions be publicly announced?

    Response: The FCC started to look into the allegations of geolocation data misuse soon after being made aware of the allegations in 2018. Our investigation is ongoing, and the Commission's policy is not to comment on ongoing investigations.

3. Has the statute of limitation expired or will it soon expire on any investigations related to the sale of geolocation data by wireless carriers or related third-party companies?

    a. If so, has the FCC secured agreements allowing investigations to continue beyond any statutes of limitations?

    Response: The FCC does not comment publicly on enforcement investigations. However, the FCC's Enforcement Bureau as a general matter keeps close track of statutes

of limitations and takes necessary steps to preserve its ability to take effective action if warranted by the facts.

4. During the worst fire in California's history, Verizon throttled the data speeds of Santa Clara County firefighters, hindering their ability to communicate.

    a. If the 2015 *Open Internet Order* wasn't repealed, could this practice have been considered a violation of the ban on "unjust and unreasonable" business practices?

    b. Has the FCC taken any actions to avoid a repeat of this issue in California and other parts of the country by Verizon or other ISPs?

    Response: As Santa Clara County itself acknowledged in a court filing, Verizon's actions here did not violate the Commission's *Title II Order*. Indeed, the *Title II Order* accepted the type of data plan Santa Clara purchased from Verizon (i.e., one in which speeds are slowed after a subscriber uses a specified amount of data) as the industry norm. Notably, repealing the *Title II Order* made clear that Verizon could offer a new plan that would favor public safety customers in a declared emergency, even though this would mean treating some users differently from others.

5. Under the 2015 *Open Internet Order*, the FCC could investigate possible violations of bright-line prohibitions of net neutrality and other "unjust and unreasonable practices."

    a. Since the 2017 *Restoring Internet Freedom Order*, has the FCC been investigating whether ISPs are engaging in blocking, throttling, or paid prioritization practices, both as disclosed by ISPs and undisclosed practices?

    b. If not, would the FCC even know if "Over the past year, the Internet has remained free and open," as Chairman Pai stated on January 2, 2019?

    Response: The Internet was free and open before the Commission adopted the *Title II Order*, and the Internet has remained free and open since its repeal. We know this because the Commission has not seen any credible evidence of harmful network management practices since the repeal. In addition, Internet speeds are up almost 40%, infrastructure investment is up year-over-year, and fiber was deployed in 2018 to more new U.S. homes than any year before—all consistent with an open Internet. I would note, finally, that the *Restoring Internet Freedom Order* returned jurisdiction to the Federal Trade Commission to oversee the practices of Internet service providers as well as other online players, and the FCC's Memorandum of Understanding with the FTC outlines the ways that the two agencies will coordinate in protecting consumers going forward.

6. The National Verifier has launched in 16 states where it lacks access to any databases for state-administered programs, such as the Supplemental Nutrition Assistance Program and Medicaid. Should an individual be informed that the National Verifier was not able to confirm their eligibility, they could reasonably consider this a denial from Lifeline, even though they may be eligible.

    a. Given these issues, what specifically is the FCC or USAC doing to ensure the National Verifier connects with state databases in the states where it has launched or where it is planning to launch, and what is the timeline to do so?

    b. Given the above issues regarding the rollout of National Verifier, why is the FCC pushing forward to launch in more states rather than focusing on improving connections to federal and state databases in states where National Verifier is currently deployed?

    Response: The Commission and USAC have made significant progress in rolling out the National Verifier and are working diligently to meet the December 2019 deployment timeframe established by the FCC in the 2016 *Lifeline Order*. As of June 25, 38 states and territories are participating in the National Verifier—27 of these have fully launched, and 11 have soft launched. Currently, the National Verifier can automatically check applicants' eligibility either through the automated connection to the Federal Public Housing Assistance database or, if available, through an automated connection to a state eligibility database. If an applicant's eligibility cannot be confirmed through an automated connection, the applicant can still qualify for Lifeline by submitting eligibility documentation.

    USAC and the FCC are working to improve the state and federal automated connections available through the National Verifier as the rollout progresses. For example, USAC and the FCC are in the process of establishing an automated connection with the Centers for Medicare and Medicaid Services. This connection would automatically verify the eligibility of Lifeline applicants who participate in Medicaid. As this connection could enable the National Verifier to automatically verify the eligibility of up to 60% of Lifeline subscribers, this will be a significant step forward. I expect this automated connection to be established later this year, and Lifeline applicants in all states and territories will be able to have their eligibility checked through this connection, regardless of whether a state automated connection has been established.

    The FCC and USAC also continue to pursue additional automated connections to verify eligibility at the state level and will work with any state or territory that wants to build an automated connection with the National Verifier, including states that express interest in establishing an automated connection after the National Verifier has soft launched in that state. USAC is currently working with several states where the National Verifier has already launched to determine whether an automated connection can be established. I am confident that implementing the National Verifier nationwide will help root out waste, fraud, and abuse in the Lifeline program.

7. As the FCC considers USTelecom's petition for forbearance from key provisions of the Telecommunications Act of 1996, what has the FCC done to consider the impact of granting this petition on (i) small and medium-sized ISPs building out the fiber networks needed for upgrading our country's wireless infrastructure to 5G and for closing the digital divide; and (ii) federal, state, local, and tribal government agencies, particularly those that will continue to rely on TDM-based telephone services through the continued availability of resale requirements?

   Response: Staff in our Wireline Competition Bureau and Office of Economics and Analytics have been carefully reviewing the record of this proceeding over the last year, including the impact any grant of forbearance would have on small- and medium-sized Internet service providers as well as federal, state, local, and Tribal governments. Based on the record to date, I have circulated to my colleagues a carefully balanced resolution of issues with respect to the unbundling of certain middle-mile transport services. Specifically, we forbear from these requirements only where nearby competitive fiber exists. Notably, this decision should help, not hurt, those small- and medium-sized Internet service providers that are building out their own fiber transport networks. And I should note that USTelecom has withdrawn the portion of its petition that sought relief from our dark-fiber transport unbundling requirements.

8. Should the FCC further eliminate media ownership rules as it is considering, Americans may experience a sharp reduction in the breadth and diversity of voices available in any local media market. One entity could control all broadcast TV stations, local newspapers, and radio stations. This is a direct rebuke to a fundamental value that underpins our democracy. Please share whether you are considering such outcomes and to what degree you have concerns about the consolidation of media ownership.

   a. Has the FCC's newly created Office of Economic Analysis provided input on the impact of eliminating media ownership rules on consumer prices in the video marketplace?

   Response: Congress requires the Commission to review its media ownership rules every four years to determine if they are "necessary in the public interest as the result of competition." The 2018 *Quadrennial Review Notice of Proposed Rulemaking* seeks comment on the current media marketplace and whether the current ownership rules should be retained, modified, or eliminated. The Commission did not adopt any tentative conclusions concerning whether the current rules should be retained, modified, or eliminated, and the record will guide the Commission on the best path forward. I expect the Office of Economics and Analytics will provide input as we move forward with this proceeding, as they do in our other proceedings. Generally speaking, I do believe it is important for the Commission's regulations in this area to reflect the marketplace that exists today, not the marketplace as it stood in 1975.

9. The FCC is considering a proposal to alter what may be considered toward the statutory maximum of five percent franchise fees (MB Docket No. 05-311). This would negatively impact the access of communities to public, educational, and governmental (PEG) programming. As I stated in my February 22, 2019 letter to the FCC, Congress clearly intended for communities to have access to PEG. The legislative history of the 1984 Cable Act explicitly states that franchise fees are only made up of monetary payments and do not include PEG contributions (H.R. Rep. No. 98-934 (1984)). Congress made its intent on this matter explicit and clear.

    a. Under what statutory authority is the FCC considering this proposal which would have the effect of including PEG contributions in franchise fees?

Response: The pending proceeding is a direct result of a 2017 remand by the U.S. Court of Appeals for the Sixth Circuit in *Montgomery County, Md., et al v. FCC.* In *Montgomery County*, the court upheld the Commission's interpretation that in-kind (i.e., non-cash) exactions are "franchise fees" subject to the statutory five percent cap on franchise fees in Section 622 of the Communications Act (47 U.S.C. § 542). The court agreed with the Commission that the terms "tax" and "assessment," which are included in the definition of franchise fee, can include nonmonetary exactions. However, the court found that the Commission's interpretation applied only to non-cable-related contributions. Therefore, the court directed the Commission to determine and explain on remand whether cable-related, in-kind contributions are "franchise fees" under Section 622. I believe that the tentative conclusion in the Further Notice of Proposed Rulemaking—specifically, that the capital costs for public, educational, and government access facilities required by the franchise are cable-related, in-kind contributions excluded from the statutory five percent franchise fee cap—is consistent with the statutory language of Section 622 and the associated legislative history.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Jerry McNerney (D-CA)

1. When I asked you if President Trump or anyone from the White House has ever reached out to you about FCC license concerns or any other issue pending before the FCC related to an entity President Trump thinks unfairly covered him or his Administration, you said "no, not to my knowledge." Can you check with all FCC staff if President Trump or anyone from the White House has reached out to them about FCC license concerns or any other issue pending before the FCC related to a media entity President Trump has been critical of, insulted, condemned or threatened (including, but not limited to, via Twitter)?

   Response: No one on the Commission staff has notified my office that the President or anyone in the White House has contacted them directly about FCC license concerns or any other issue pending before the FCC related to a media entity.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Peter Welch (D-VT)

1. As you know, the broadcast television incentive auction and subsequent post-auction transition has been disruptive to users of wireless microphone technology such as theaters, performing arts organizations, houses of worship, and concert venues. In 2017, the Commission proposed a rule that would expand Part 74 license eligibility to persons and organizations that routinely use less than 50 microphones and demonstrate the need for professional, high-quality audio. When will the Commission give finalize this rule, which provides a critical accommodation to smaller entities that rely on wireless microphones?

   Response: We understand the importance of interference protection for entities that routinely use wireless microphones but do not meet the 50-microphone threshold for Part 74 licenses. The Commission received many comments in response to the proposals, and staff is currently analyzing the record and working on recommendations on how to proceed.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Yvette D. Clarke (D-NY)

1. It is wonderful to see how technology has broken down barriers for people with disabilities, but I am concerned this same technology can introduce new challenges for consumers. As the FCC considers moving to fully Automated Speech Recognition or ASR, I am concerned that fully automated ASR might not work as well for certain types of accents or voices. This could become a serious problem as we move towards widespread adoption of such services. Certain consumers might be left behind.

    a. What has the FCC done to investigate whether fully automated ASR for IP CTS does not feature implicit or inadvertent bias?

    b. Will you commit to undertake such studies before certifying an ASR only provider?

    Response: I agree that IP CTS is a critical service for individuals with hearing loss. As you know, the vast majority of captioned telephone services already rely on automated speech recognition. However, those services previously have required the interposition of a communications assistant between the caller and the speech recognition software to "revoice" a caller's words. This interposition slows transcription, reduces the privacy of calls for callers, and increases the costs of IP CTS. That's why the Commission took steps to modernize IP CTS in June 2018 when we authorized the use of automated speech recognition without a communications assistant. We found that such automated speech recognition has become a viable alternative with its improvements in accuracy, speed, and privacy. Commenters in the proceeding raised similar concerns about the effectiveness of services without a human intermediary for certain types of calls, including callers with accents, but those commenters did not show the interposition of communications assistant perform better in such circumstances. And the Commission found that delay in introducing automated speech recognition was not necessary because consumers will continue to be able to select a provider based on quality of service and available methods, as automated speech recognition will not be the sole means of offering IP CTS. Additionally, I want to stress that nothing regarding our reforms allows substandard service: Providers using automated speech recognition must continue to meet the Commission's minimum Telecommunications Relay Service standards and report data to the Commission to help us determine if further measures are necessary.

2. In considering the UST petition, does the Commission have the flexibility to take into account disparate market conditions or is it required to simply approve the petition as filed? Does the Commission have the flexibility to consider the impact of a natural disaster in a local market, such as Hurricane Maria in Puerto Rico, and how the local market conditions were and still are being impacted post-hurricane?

    Response: Section 10 of the Communications Act provides that if certain criteria are met, the Commission "shall forbear from applying any regulation or any provision of this

chapter to a telecommunications carrier or telecommunications service, or class of telecommunications carriers or telecommunications services, *in any or some of its or their geographic markets*" (emphasis added). Accordingly, the Commission has the flexibility to consider such factors and may grant limited relief on a geographic basis if warranted.

3. Will the Commission take into account the special circumstances of how Hurricane Maria devasted the local telecom infrastructure, as well as the local economy, into its consideration of the UST petition and whether such deregulation should occur at this time in Puerto Rico?

   Response: Providers on both sides of the issue have raised the circumstances in Puerto Rico as an issue in the forbearance proceeding, and the Commission will be addressing those circumstances as we move forward.

4. The Telecommunications Act of 1996 did not preempt local regulatory bodies from the Commission's evaluation of whether a market was competitive or not and thus warranted certain regulatory relief.

   a. Will you give deference to the input from the local jurisdictions as to whether the local market conditions warrant deregulation at this time, particularly in the case Puerto Rico where the recovery efforts are still ongoing?

   Response: The Commission will be mindful of all evidence in the record, including submissions from local regulatory bodies.

5. The FCC is considering eliminating its local TV ownership rule. This could allow the same entity to control all ABC, NBC, FOX, and CBS programming in the same market. It would even allow that entity to control the local newspaper.

   a. Can you please share your thinking about such consolidation?

   b. Can you please describe the harms and benefits of such consolidation?

   Response: Congress requires the Commission to review its media ownership rules every four years to determine if they are "necessary in the public interest as the result of competition." The 2018 *Quadrennial Review Notice of Proposed Rulemaking* seeks comment on the current media marketplace and whether the current ownership rules should be retained, modified, or eliminated. The Commission did not adopt any tentative conclusions concerning whether the current rules should be retained, modified, or eliminated, and the record (still under review) will guide the Commission on the best path forward. Generally speaking, I believe it is important for the Commission's regulations in this area to reflect the marketplace that exists today, not the marketplace as it stood in 1975.

6. The FCC has recently added a new office of economic analysis. Its stated purpose is to ensure that the FCC will accurately weigh costs and benefits of any rule changes.

    a. Has the office engaged on questions of local media ownership? If so, has it considered issues of retail price increases?

Response: I expect the Office of Economics and Analytics will provide input as we move forward with this proceeding, as they do in our other proceedings.

7. Often it was the companies that offered these services to gain good will from the community, and the companies received a large return for what it characterized as a de minimis cost.

    a. Now that the community relies on these services, how does the Commission propose to address the loss of these services to communities if it supports the cable companies' position that these former de minimis services should be charged to the community at market rate?

Response: The pending proceeding is a direct result of a 2017 remand by the U.S. Court of Appeals for the Sixth Circuit in *Montgomery County, Md., et al v. FCC.* As a result of the remand, we are obligated to take another look at how to interpret the definition of "franchise fees" in Section 622 of the Communications Act (47 U.S.C. § 542), and specifically how "in-kind" services, such as those related to PEG channels, fit within the statutory definition. We are still evaluating the record in this proceeding. However, I believe that the tentative conclusion in the proceeding—specifically that the capital costs for PEG channels required by a franchise are cable-related, in-kind contributions that must be excluded from the statutory five percent franchise fee cap—is consistent with the statutory language of Section 622 and the associated legislative history. To the extent we ultimately find that certain PEG-related costs must be included in the franchise fee under the statute, local governments would still be able to require cable operators to fund such costs as part of the franchise, but they may have to ensure that such obligations fit within the statutory cap.

8. Is it the Commission's position that the cost of any single strand of fiber for the provision of PEG channels and institutional services is not negligible when the cost of fiber to the companies has been decreasing while the amount of strands in a fiber pull has been increasing over the years? What concrete evidence does the commission have that there is a direct and real impact on new services and other consumer benefits offered to the consumers on [by] the cable companies? In fact, could it not be argued that there was a far greater impact years ago when the companies had fewer strands for its own use?

Response: In the *Second Further Notice of Proposed Rulemaking*, the Commission tentatively concluded that "treating all cable-related, in-kind contributions as 'franchise fees,' unless expressly excluded by the statute, would best effectuate the statutory purpose." *Second Further Notice of Proposed Rulemaking*, MB Docket No. 05-311, at ¶

20. The Commission sought comment on whether PEG channel capacity and institutional network costs are expressly excluded by the statute, and on how to value those costs for purposes of calculating the franchise fee if they are not expressly excluded. We continue to evaluate the record with respect to these questions.

9. Cable companies do not advertise PEG and I-Net as part of their services to the public, and ostensibly every provider includes it as part of their offer to an Local Franchise Authority.

    a. Given that this Commission has argued that increased competition between providers would be what spurs innovation, how can it then argue that benefits offered by the cable companies to communities have any effect on innovation when it is not part of any service package offered to a customer?

    b. Wouldn't the advertised services offered by a competitor be the impetus for a company to innovate and improve?

    Response: To the extent you are asking whether cable operators should have strong incentives to promote PEG channels, that particular issue is outside the scope of our current remand proceeding. To the extent that you are asking for the business reason cable operators offer PEG and I-Net services to LFAs, the record reflects that LFAs demand PEG and I-Net services rather than cable operators offering the services for a competitive reason.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Tony Cárdenas (D-CA)

1. I recently wrote a letter to the FCC regarding the deployment of mid-band spectrum—specifically the C-band—for 5G services. I believe this spectrum could help accelerate the introduction of next-generation wireless services to communities across the country. Accordingly, I believe that any attempt to reallocate mid-band spectrum for 5G use should seek to maximize the amount of mid-band spectrum that is ultimately made available. I also believe that during any reallocation, the important programs that consumers in my district use for local news, weather, and entertainment should be protected. I appreciate your response to the letter and that you agree.

   My understanding is that a public auction involving the C-band spectrum would likely result in both a fair, open, and transparent process, as well as substantially more mid-band spectrum being made available for 5G than the privately-managed spectrum sale. While the market is adept at handling certain things, the FCC's oversight of this limited resource will ensure that any reallocation happens in a way that gives access to all Americans.

   a. Will the FCC commit to a fair, open and transparent FCC-led process—consistent with Section 309(j) of the Communications Act—for the reallocation of C-band spectrum for next-generation wireless services? I think it is very important that the FCC go through the auction process so that it can balance a thoughtful approach with expedience so that we can protect our national security and ensure the U.S. remains competitive globally.

   Response: In its 2018 Notice of Proposed Rulemaking, the Commission sought detailed comment on a variety of band-clearing proposals, in an effort to balance several policy goals, including speed to market, efficiency of spectrum use, transparency, and protecting incumbents. In any reallocation of this band—whether it be through market mechanisms or through an FCC-led approach—a fair, open, and transparent process is a top priority.

2. Earlier this year the FCC's *Tribal Lifeline Order* was overturned by the DC Circuit. The DC Circuit said the agency had failed to justify its 2017 decision to require Lifeline providers serving Tribal lands to own their own facilities—barring Lifeline resellers from offering Lifeline on Tribal lands. The FCC currently has a proposal pending that would eliminate Lifeline resellers from the Lifeline program altogether—meaning that the providers that approximately 70% of Lifeline subscribers rely on would no longer be eligible to offer service.

   a. Will the FCC be moving forward with this proposal?

   b. Is there a contingency plan for what will happen to the 70% of subscribers who will lose their Lifeline provider if you eliminate resellers from the program?

c. What happens in states or locations where there are no facilities-based providers in the Lifeline program?

Response: The Lifeline program remains subject to an unacceptably high improper payments rate and wireless resellers have been the subject of the vast majority of Lifeline investigations for waste, fraud, and abuse. As such, the Commission sought comment on a variety of proposals to improve administration of this vital program. We have not reached any conclusion on how to proceed at this point.

3. In 2004, 2011, and 2016, the Third Circuit Court of Appeals instructed the Commission to perform the relevant analysis necessary to conduct a thorough and informed review of its ownership diversity policies and the impact from changes. Yet still the Commission has failed to study the impact of its rules on ownership by women and people of color, and now in the quadrennial review NPRM proposes possible further relaxation of its rules without such analysis, flagrantly disregarding the Court's explicit mandate.

   a. Why has the Commission still failed to undertake the required research?

   Response: The Commission properly considered the potential for changes to its structural ownership rules to impact minorities and women. As the Commission emphasized recently to the Third Circuit Court of Appeals, the Commission found in its 2017 *Order on Reconsideration* of the 2010/2014 Quadrennial Review that its elimination of the radio/television cross-ownership rule and the newspaper/broadcast cross-ownership rule, and modification of the Local Television ownership rule would not have an adverse impact on minorities or women. This conclusion was based on the extensive record developed during the proceeding, including a lack of data demonstrating such alleged harm.

   In addition, the Commission addressed the diversity issues remanded from the Third Circuit in its 2016 *Second Report and Order* in the 2010/2014 Quadrennial Review. In that order, we reinstated the revenue-based eligible entity standard after careful consideration of other possible definitions. Further, in the 2017 *Order on Reconsideration* the Commission adopted an incubator program to support new and diverse ownership in the radio market and sought comment on how to implement it. I'm pleased that the Commission has since adopted implementation procedures, and the Bureau recently announced that it is accepting applications for the new incubator program. I have long believed that such a program will provide for increased ownership in the broadcasting industry by new entrants, including minorities and women. Additionally, we have other diversity proposals currently under review in the 2018 Quadrennial Review.

4. Hundreds of electric utilities have licenses in the 6 GHz band for microwave communications. These communications are critical, particularly during emergency situations. For example, electric utilities use this band to relay information and monitor the heath and status of power lines, especially important in states like California, which has been devastated by wildfires in the last few years. I applaud the FCC for examining a more efficient use of spectrum. However, it's extremely important that these critical communications do not experience interference.

    a. What steps will the FCC take to balance the need to reallocate spectrum with the need to protect the crucial communications on the 6 GHz band used by electric utilities?

Response: We share the same goals. That's why the Commission's October 2018 Notice of Proposed Rulemaking proposed to allow unlicensed use of the 6 GHz band while ensuring that the licensed services operating in the spectrum would continue to thrive.

More specifically, to minimize any potential harmful interference, we proposed rules for two types of unlicensed devices tailored to protect incumbent services that operate in distinct parts of the 6 GHz band. In the 5.925-6.425 GHz and 6.525-6.875 GHz sub-bands, unlicensed devices would only be allowed to transmit under the control of an automated frequency control system. These frequencies are heavily used by point-to-point microwave links (such as oil rigs and electric utilities) and some fixed-satellite systems. The automated frequency control system would identify frequencies on which unlicensed devices could operate without causing harmful interference to fixed point-to-point microwave receivers.

In the remainder of the 6 GHz band—that is, the 6.425-6.525 GHz and 6.875-7.125 GHz sub-bands—unlicensed devices would be restricted to indoor use and would operate at lower power, without an automated frequency control system. These frequencies are used for mobile services, such as the Broadcast Auxiliary Service and Cable Television Relay Service, as well as fixed-satellite services. Because technical aspects of these mobile services make the use of an automated frequency control system impractical, the FCC has proposed a combination of lower-power and indoor operations, which would protect licensed services operating on these frequencies from harmful interference.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Darren Soto (D-FL)

1. Late last year, the FCC initiated a proceeding looking at how to mitigate space debris. While I think it is a positive step to consider how to address this problem, the Commission may not have the technical expertise or the resources necessary to develop or enforce the complicated regulations it is considering proposing. Further, I understand the FCC has requested a reduced budget for these activities in FY20.

    a. Do you agree that it is important to ensure that any orbital debris mitigation regime be straightforward and enforceable?

    b. Please provide me with the number of employees supporting this project in total and the number of employees on this project with undergraduate or graduate degrees in relevant technical fields, specifically: aerospace, aeronautical, and/or astronautical engineering. Given the reduced budget you are requesting for FY20, is the FCC able to hire additional technical experts with degrees in these fields?

Response: The Commission has assessed orbital debris mitigation plans as part of its satellite authorization role for almost twenty years. And in 2004, the Commission was one of the first regulatory agencies to adopt comprehensive orbital debris mitigation regulations. Those regulations were based on the U.S. Government Orbital Debris Mitigation Guidelines developed by NASA and other U.S. government agencies, which in turn became the basis for debris mitigation guidelines adopted by the United Nations.

At the end of 2018, the Commission started a proceeding to update these regulations. Given the Commission's important role in licensing non-Federal satellite systems, we have a responsibility to review our current orbital debris mitigation rules to explore whether rule changes are needed as we enter a new era in which thousands of new satellites are deployed. We also continue to work with our federal partners to improve debris mitigation practices, including providing support to the NASA-lead effort to update U.S. Government Orbital Debris Mitigation Guidelines.

Orbital debris mitigation activities are accounted for in FCC cost accounting systems as part of licensing and other more general categories, so precise figures are not available. Senior staff estimate that not more than three FTEs are devoted to reviewing the portions of applications that discuss debris mitigation plans, and in the currently ongoing rulemaking proceeding to update debris mitigation rules. These FTEs include engineering and legal staff, with some additional economic staff FTEs (less than one) anticipated in the future. I am confident that the current professional staff working on this issue at the Commission have the necessary technical expertise to implement and enforce any rule modifications the Commission makes. Likewise, our current budget resources are adequate to address the issues raised in our proceeding.

2. What is the FCC currently doing to ensure that minority programmers are being included by providers; especially in Metropolitan Statistical Areas (MSA) with large minority communities that are currently being underserved?

   Response: Except in limited circumstances, multichannel video programming distributors (MVPDs) generally have discretion to decide which channels to carry on their systems. However, Section 616 of the Communications Act directed the Commission to establish rules to govern the carriage agreements between MVPDs and programmers. The Commission's program carriage rules prohibit an MVPD from (i) requiring a financial interest in a program service as a condition for carriage; (ii) coercing a programmer to grant exclusive carriage rights; or (iii) discriminating against unaffiliated programmers on the basis of affiliation or non-affiliation. The rules are enforced on the basis of complaints.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Robert E. Latta (R-OH)

1. When Congress passed the Americans with Disabilities Act in 1990, it directed the Commission to ensure that hearing and speech-impaired individuals be able to place and receive assisted telephone calls. Congress also directed that these telecommunications relay services be paid for equitably—with intrastate assessments used to fund intrastate services and interstate assessments used to fund interstate relay services.

   The Commission chose to "temporarily" fund the entire telecommunications relay service program through only interstate (and international) assessments and then repeated that "temporary" funding approach in 2007 when internet protocol service calls (IP CTS) were added to the program.

   As I understand it, last year the Commission proposed in its Further Notice of Proposed Rulemaking (FNPRM) on IP CTS to revise the funding mechanism so that all IP CTS calls would be recovered from all providers of, intrastate, interstate and international telecommunications, interconnected VOIP and non-interconnected VOIP providers.

   Mr. Chairman, can you provide a timeline for completing the provisions of your 2018 FNPRM related to correcting the "temporary cost recovery method" and creating a permanent method in advance of the 2020-2021 TRS Fund year?

   Response: The comment cycle on the FNRPM closed on October 16, 2018. Commission staff continue to review the record developed on the issues raised in the FNPRM to develop recommendations for the full Commission's consideration. I do not have a specific timeframe that I can offer at this time on the resolution of the proceeding.

2. My concern is about how we deliver broadband to all Americans, especially unserved and underserved Rural America. One technology will not be the panacea for this challenge, but we will need a combination of solutions. Can you comment on what role you see spectrum playing in rural America and discuss if you think spectrum sharing is a feasible part of that solution?

   Response: Bridging the digital divide is the top priority for the Commission, and we are working in many ways to ensure that we meet our statutory directive to make available, so far as possible, communications services in rural America. Fixed and mobile wireless broadband will play a major role in achieving this goal. And increasing the availability of spectrum for the commercial marketplace—whether high-band spectrum (like 24 GHz), mid-band spectrum (like 3.1-3.55 GHz), or low-band spectrum (like 1.675 MHz)—requires the increased sharing of airwaves by a variety of parties.

   Of note, the Commission is considering how particular spectrum bands can play a pivotal role in bridging the digital divide. For example, the Commission is currently considering updating the framework for licensing Educational Broadband Service (EBS) spectrum in

the 2.5 GHz band, which constitutes the single largest band of contiguous spectrum below 3 gigahertz and is prime spectrum for next-generation mobile broadband. I have circulated a draft order to my colleagues that would give current EBS licensees and lessees more flexibility that could promote deployment, bring to market spectrum in this band that lies fallow across approximately one-half of the United States, open a priority window for Tribal Nations, and auction the remainder of white spaces to commercial operators.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Greg Walden (R-OR)

1. On June 1, 2016, the FCC issued a public notice proposing three interdependent phases of a testing program with the United States Department of Transportation (USDOT) and the National Telecommunications and Information Administration (NTIA) to evaluate the 5.9 GHz band utilizing two sharing proposals, "detect and vacate" and "re-channelization" interference mitigation strategies.

    a. What is the status of this three interdependent phase test program, including timing for each of the three phases?

    b. Does the FCC plan to complete this three interdependent phase test program with USDOT and NTIA before the rulemaking proceeding begins that was announced at the Wi-Fi World Congress 2019? If not, please explain why not.

    c. Has the FCC communicated with USDOT and NTIA about any new plans regarding the 5.9 GHz rulemaking and its impact on the three interdependent phase test program?

    Response: Phase 1 of the testing is complete and the Commission has published and received comment on the test report. Phase 2, which involves basic field tests, would be conducted by the Department of Transportation in coordination with the FCC. Phase 3 too will be handled by the Department of Transportation. At this juncture, we understand the Department has not yet received devices to test from the suppliers. We are in routine contact with our federal partners concerning ongoing issues related to this matter, and we believe that a 5.9 GHz rulemaking could and should run concurrently with continued testing given the narrow scope testing proposed by the last Administration.

2. If stakeholders seek to deploy a technology other than DSRC in the 5.9 GHz band, would that require an action by the FCC?

    Response: Yes. The Commission's current rules limit the band to DSRC. Accordingly, other automotive safety technologies, such as Cellular Vehicle-to-Everything, or C-V2X, cannot be fully developed and deployed in the United States unless and until the FCC takes action.

3. What proportion of the 75MHz available in the 5.9 GHz band would be used directly for safety-related purposes by the DSRC technology?

    Response: Currently, the Commission's rules designate only 30 MHz of the band for safety-related purposes. The Commission has been evaluating the record in our pending proceeding about what portion of the spectrum should be devoted to safety services. If the Commission chooses to initiate a proceeding to reexamine the use of this spectrum, I believe this issue should be explored further.

4. This subcommittee has held numerous hearings on accelerating the deployment of fifth generation wireless and multigigabit broadband networks over the last several years. How is the U.S. effort to win this worldwide technology race taken into account as the FCC analyzes the best use of various bands in the public interest? Has the FCC analyzed the worldwide standardization in the 5.9 GHz band and market adoption trends of technologies deployed in this band internationally in order to promote American competitiveness on potentially life-saving technologies?

   Response: The Commission has continued to support a strategy of making spectrum available for 5G in low, mid and high bands. My 5G FAST plan provides a three-prong roadmap for moving ahead to ensure American competitiveness, with an emphasis on spectrum deployment. The President's April 12 announcement making it a national priority to "win[] the race to be the world's leading provider of 5G cellular communications networks" and the fact that other countries and regions similarly aim to lead in 5G both inform our efforts. They underscore the importance of other federal agencies cooperating with, rather than frustrating, the FCC's efforts to free up spectrum for the commercial marketplace (especially when the FCC's goals can be accomplished without affecting—and in some cases aiding—the operations of those agencies that rely on spectrum).

   With regard to the 5.9 GHz band specifically and the recent development of Cellular Vehicle-to-Everything, or C-V2X, staff are evaluating how the U.S. stands relative to international developments in this portion of the spectrum. It is already clear that automotive safety technologies other than DSRC, such as C-V2X, cannot be fully developed and deployed in the United States unless and until the FCC takes action.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable John Shimkus (R-IL)

1. Under the FCC's oversight, the Universal Service Administrative Company (USAC) has worked to establish a "National Verifier" system to combat fraud in the Lifeline program by ensuring all applicants are eligible for Lifeline benefits. It is my understanding USAC is actively transitioning many states from "soft-launch" status, in which participation in the National Verifier system is voluntary, to a mandatory verification system. I want to ensure that we expeditiously continue this transition to a more secure and accurate verification system. Please describe how the FCC, working with USAC, will continue the push for implementation of a robust mandatory National Verifier system.

   Response: The Commission and USAC have made significant progress in rolling out the National Verifier and are working diligently to meet the December 2019 deployment timeframe established by the FCC in the 2016 Lifeline Order. As of June 25, 2019, 38 states and territories are participating in the National Verifier—27 of these states and territories have fully launched, and 11 have soft launched. Currently, the National Verifier can automatically check applicants' eligibility either through the automated connection to the Federal Public Housing Assistance database or, if available, through an automated connection to a state eligibility database. If an applicant's eligibility cannot be confirmed through an automated connection, the applicant can still qualify for Lifeline by submitting eligibility documentation.

   USAC and the FCC are working to improve the state and federal automated connections available through the National Verifier as the rollout progresses. For example, USAC and the FCC are in the process of establishing an automated connection with the Centers for Medicare and Medicaid Services. This connection would automatically verify the eligibility of Lifeline applicants who participate in Medicaid. As this connection could enable the National Verifier to automatically verify the eligibility of up to 60% of Lifeline subscribers, this will be a significant step forward. I expect this automated connection to be established later this year, and Lifeline applicants in all states and territories will be able to have their eligibility checked through this connection, regardless of whether a state automated connection has been established.

   The FCC and USAC also continue to pursue additional automated connections to verify eligibility at the state level and will work with any state or territory that wants to build an automated connection with the National Verifier. USAC is currently working with several states where the National Verifier has already launched to determine whether an automated connection can be established. I am confident that implementing the National Verifier nationwide will help root out waste, fraud, and abuse in the Lifeline program.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Adam Kinzinger (R-IL)

1. Mr. Chairman, regarding the Commission's 6 GHz proceeding, you stated in a recent letter to Senator Kennedy that the FCC believes an automated frequency control system will prevent interference to utilities and other critical infrastructure. I have been hearing concerns from energy companies in my district regarding potential interference. Please describe how the FCC would review the interference testing processes prior to, and after, implementation. Can the FCC provide assurances that harmful interference will be mitigated?

   Response: I can assure you that we will protect incumbent services against harmful interference. How precisely we will do that remains under consideration in the pending rulemaking proceeding.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Bill Johnson (R-OH)

1. Chairman Pai: It is vital that our federal programs like those administered by the FCC and the RUS work in concert and complement each other.

    a. Can you explain what happens if and when these programs are not coordinated?

    b. Do you have suggestions as to how these agencies and Congress can do a better job of making sure these programs coordinate and do not undermine or trip over the work of each other?

    Response: I agree it is critical that federally supported broadband programs complement and coordinate with each other. The alternative to coordination is federal support for duplicative projects which disserves consumers who lack access, undermines the government's role as a fiscally responsible steward, and displaces private investment. We welcome coordination with our federal partners and private sector entities to ensure we are not duplicating efforts. In accordance with the Agricultural Improvement Act of 2018, we coordinate with our federal partners at the Department of Agriculture and have shared with them the areas that were awarded in the Connect America Fund Phase II Auction. We will continue to coordinate our efforts with our federal partners and keep the lines of communication open to ensure that federal dollars are devoted to connecting unserved areas.

2. Chairman Pai: As for the 3.5 GHz Citizens Broadband Radio Service (CBRS) band, the FCC auction of Priority Access Licenses won't be held until next year, at the earliest. What can we do to speed up the CBRS PAL auction process to help bring this prime, mid-band 5G spectrum to market as quickly as possible?

    Response: Deployments in the 3.5 GHz band need not await an auction—the dynamic sharing environment established for this band means that commercial operators may deploy as soon as the Commission and its federal partners have authorized Spectrum Access Systems and Environmental Sensor Capabilities operators to operate. I understand from staff that we are on the verge of approving the first set of such applications and may see initial deployments later this summer.

3. Chairman Pai, the convergence between the energy and telecommunications sectors is only growing. And, their importance to each other for recovery from natural disasters and other hazards is critical to our national security. Given the impact that the FCC's policies can have on the mission critical communications networks and infrastructure the electric sector uses for grid reliability, it could be beneficial for FERC and the FCC to convene on a regular basis to discuss policies each are considering. In fact, the FCC recently released some recommendations as they pertain to storm response and recovery efforts that encourage this interaction. Can you update me on the status of FERC-FCC interaction and comment on the benefit of commissioner-to-commissioner level discussions?

   Response: Both the FCC and FERC have made it a priority to stay in regular contact to explore and promote practices that are of mutual benefit to the reliability of our sectors. My office is leading this effort and involving the relevant FCC Bureaus and Offices. Examples of specific recent engagements include:

   - FCC and FERC senior staff held a roundtable session on February 14, 2019 at FERC. This session led to a better understanding by participants of how emerging technologies will influence communications and electric sector resiliency. For example, the FCC heard that the electric utility sector plans to make wide use of the commercial 5G spectrum, now being auctioned by the FCC, to promote reliability of electric services.
   - FCC and FERC senior staff met during a roundtable session on April 8, 2019 at the FCC to continue the dialog on cross sector coordination and strengthen ties to promote reliability and resiliency of our sectors.
   - FCC staff will attend FERC's Reliability Technical Conference on June 27, 2019, which includes a panel entitled "Managing Changes in Communications Technologies on the New Grid."

   Going forward, the FCC will continue to emphasize the importance of inter-sector coordination, bolstered by strong ties between the FCC and FERC.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Bill Flores (R-TX)

1. Special Temporary License for Launch Spectrum: Chairman Pai, Space launches are a critical part of our economy, advancing American interests in exploration efforts, and national security. As you know, for each launch, the FCC requires applications for Special Temporary Authority to utilize government designated spectrum for communication with ground control. These processes were designed at a time when there were few commercial launches. Now that we have innovative companies conducting upwards of 20 launches per year, the process has become repetitive, and can create undue paperwork burdens and long-term scheduling difficulties. I understand the FCC had a pending rulemaking that would work to more efficiently streamline certain aspects of this process.

    a. Can you give any update to the status of this rulemaking?

    b. Are there ways that you need Congress to be more helpful in the process to more efficiently process launch spectrum licensing?

    Response: The rulemaking is still pending. I understand the importance of this issue and accordingly have asked staff to review this matter and develop a potential action plan going forward. This may include further action such as refreshing the record, in order to ensure that the evidence in the record is current and thorough.

2. Orbital Debris Regulatory Action: Chairman Pai, a safe orbital environment is critical to the national security, economic, and scientific goals of the United States. I understand the FCC is exploring regulatory policies to mitigate orbital debris in support of this objective. It is important that the FCC employees supporting this effort have the technical background necessary to develop appropriate recommendations.

    a. Accordingly, will you please tell me how many FCC employees are currently working in support of this effort, and how many of them have degrees in aerospace, aeronautical, or astronautical engineering?

    Response: The Commission has assessed orbital debris mitigation plans as part of its satellite authorization role for almost twenty years. In 2004, the Commission was one of the first regulatory agencies to adopt comprehensive orbital debris mitigation regulations. Those regulations were based on the U.S. Government Orbital Debris Mitigation Guidelines developed by NASA and other U.S. government agencies, which in turn became the basis for debris mitigation guidelines adopted by the United Nations.

    At the end of 2018, the Commission started a proceeding to update these regulations. Given the Commission's important role in licensing non-Federal satellite systems, we have a responsibility to review our current orbital debris mitigation rules to explore whether rule changes are needed as we enter a new era in which hundreds or thousands of

new satellites are deployed. We also continue to work with our federal partners to improve debris mitigation practices, including providing support to the NASA-lead effort to update U.S. Government Orbital Debris Mitigation Guidelines.

Orbital debris mitigation activities are accounted for in FCC cost accounting systems as part of licensing and other more general categories, so precise figures are not available. Senior staff estimate that not more than three FTEs are devoted to reviewing the portions of applications that discuss debris mitigation plans, and in the currently ongoing rulemaking proceeding to update debris mitigation rules. These FTEs include engineering and legal staff, with some additional economic staff FTEs (less than one) anticipated in the future. I am confident that the current professional staff working on this issue at the Commission have the necessary technical expertise to implement and enforce any rule modifications the Commission makes.

3. L-Band Spectrum Usage for 5G: Chairman Pai, I commend your recent efforts in advancing a proposed rulemaking regarding the L-band portion of mid-band frequencies at 1675-1680 MHz. As you know, many of us previously encouraged the Commission to consider shared commercial access to the band, which has enjoyed both bipartisan Congressional and Administration support for several years. And since mid-band spectrum is such an essential component for a full 5G buildout, we welcome your pursuit of an all-of-the-above strategy to identify and free up additional frequencies for the commercial marketplace.

   As your colleague, Commissioner Brendan Carr, emphasized during your May meeting, if the five MHz between 1675 and 1680 is combined with adjacent and nearby channels, the Commission could ultimately free up a 40 MHz block of L-band spectrum with excellent characteristics for next-gen mobile broadband. While the NPRM on 1675-1680 MHz is a great start, can we expect to see FCC action to open up those additional L-band frequencies in the next couple of months? Does your agency have all the information it needs to make this spectrum available for 5G?

   Response: Our goal is to free up more spectrum for wireless broadband while also including safeguards to ensure that any new commercial operations do not result in harmful interference to incumbent federal operators. We continue to work on assessing appropriate next steps for the additional L-Band frequencies in question.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Susan W. Brooks (R-IN)

1. Can you elaborate on how the FCC will act on the Prague Principles and how Congress can support efforts to ensure the integrity of 5G network build out?

   Response: The FCC believes one of our top priorities must be protecting the security and integrity of the ICT supply chain. We believe national security should be a key consideration in the evaluation of all telecommunications infrastructure-related projects and service provisions, including national security review of foreign investment transactions and applications for telecommunications licenses, among others.

   That's why the FCC fully supports the Prague Proposals and has already taken steps to act on them. *First*, the FCC has proposed to prohibit the use of the broadband funding we administer to purchase equipment or services from any company that poses a national security threat to the integrity of United States communications networks or the communications supply chain. *Second*, the FCC rejected China Mobile's petition to provide international telecommunications services in the United States. This decision came after a lengthy Executive Branch review of the application and consultation with the U.S. intelligence community, which concluded China Mobile posed substantial national security and law enforcement concerns that could not be adequately mitigated.

   The FCC will continue to review the Prague Proposals, and identify additional steps it can take to implement them, including reviewing existing and future foreign investment and equipment in the ICT space that may pose a national security threat to 5G networks.

2. I firmly believe that letting the private sector compete is the best way to ensure the U.S. will be the world leader in 5G technology. Can you address criticisms of that idea and the notion that the U.S. should nationalize a wholesale 5G network to somehow ensure its leadership in this space?

   Response: The FCC's facilitation of a private sector approach to 4G resulted in the U.S. becoming the global leader in 4G and reaping the economic benefits. The same approach will position the U.S. to be the global leader in 5G as well. Consistent with this, the FCC is pursuing a three-part strategy called the 5G FAST Plan—freeing up spectrum, making it easier for industry to install wireless infrastructure, and modernizing regulations to promote the wired backbone for 5G networks. And reports from earlier this year show that the plan is working, with the United States improving its position in the race to 5G. All of these gains would be put at risk should this country make the foolish gamble of a federally built, owned, and/or operated 5G network.

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Tim Walberg (R-MI)

1. As you know, broadband mapping has been a concern among a bipartisan group of Representatives and Senators. As the Commission contemplates future reverse auction mechanisms within the USF program, it is important that the Commission not only improve its own maps but also coordinate with other Federal agencies on their mapping of broadband availability and broadband support mechanisms tied to such mapping. I appreciate your leadership in taking initiative to update the Commission's map, and I look forward to the completion of the FNPRM in WC Docket No. 11-10.

    a. Can you please provide a timeline on when the Commission will finish this proceeding?

    b. Will you commit to working with me as you continue to update your methodology before distributing any new high cost support?

    c. During the hearing, Commissioner O'Rielly stated that, "absent Congressional, statutory language, [other agencies] have a tendency to go their own route."

        As Congress contemplates authorizing new or additional authority on broadband mapping and coordination:

        i. How do we ensure that definitions of "unserved," "underserved," and "served" are appropriately tailored to prevent this duplication, while allowing agencies to continue offering broadband support that appropriately complements other agencies' efforts?

        ii. How do we ensure that definitions of "broadband" are tailed such that agencies cannot evade the intent of potential statutory authorities to comply with coordination?

        iii. How do we ensure that different types of data collected by various agencies are driven by minimally acceptable levels of granularity so that agencies can standardize data collection and reduce instances of overbuilding?

Response: Broadband must be available to all Americans, regardless of where they live. Updated and accurate broadband data is important to accomplishing this goal. We must understand where broadband is available and where it is not to target our efforts and direct funding to those areas most in need. That is why the Commission began a top-to-bottom review of the Form 477 process to ensure that broadband data was more accurate, granular, and ultimately useful to the Commission and the public.

After a thorough review of the record and the painstaking work of our career staff, I intend to circulate a report and order for the FCC's monthly meeting in August that

would result in more granular and more accurate broadband maps. That means requiring broadband providers to report where they actually offer service below the census block level and looking to incorporate public feedback into our mapping efforts. I welcome your support for this project and look forward to continuing to work with you on our shared goal of improving the Commission's broadband coverage maps.

I also agree it is critical that federally-supported broadband programs complement and coordinate with each other. The alternative to coordination is federal support for duplicative projects, which disserves consumers who lack access, undermines the government's role as a fiscally responsible steward, and displaces private investment. We welcome coordination with our federal partners and private sector entities to ensure we are not duplicating efforts. In accordance with the Agricultural Improvement Act of 2018, we coordinate with our federal partners at the Department of Agriculture and have shared with them the areas that were awarded in the Connect America Fund Phase II Auction. We will continue to coordinate our efforts with our federal partners and keep the lines of communication open to ensure that federal dollars are devoted to connecting unserved areas.

2. The Commission recently released its report on wireless resiliency and how best to coordinate restoration after major storms with power companies. One of the biggest takeaways from the report is the need for increased communication between power companies and communications providers—which would be helped by having a nationwide, interoperable broadband network dedicated for electric utility needs. Large electric utilities are engaged with the Department of Energy's National Renewable Energy Lab in an evaluation of how private LTE systems might help make the energy grid more efficient and resilient through the integration of broadband into the grid. But getting out of the lab and into the market requires usable spectrum. What is your best estimate for when the Commission might approve rules to support broadband deployment in the 900 MHz band?

    a. Could the Commission use flexibility or new tools from Congress to get this spectrum modernized for utility broadband needs in a quicker timeframe?

    b. Would pioneering a leasing model in this band be useful as a proof of concept to potentially modernize other bands through more innovative spectrum policy?

Response: In March 2019, the FCC issued a Notice of Proposed Rulemaking that proposed to reconfigure the 900 MHz band to facilitate the development of broadband technologies and services, including for critical infrastructure like electric utilities. Staff are reviewing comments filed in response to the recent NPRM, and reply comments are due on July 2. At this time, I do not believe the Commission would need additional tools from Congress to move forward with this rulemaking in a timely manner.

3. During the hearing, I briefly asked about the need for a more robust, capable workforce for the communications industry. As you know, even with unlimited spectrum, siting reforms, or Federal dollars, none of these will get 5G, next generation fiber networks, or broadcasting infrastructure into the market without a skilled, professional workforce capable of deploying it in a timely manner.

   How is the Commission approaching this workforce issue, and what steps can the Commission take to get all stakeholders to the table and create good, high-paying jobs that maintain technological leadership here in the United States?

   a. Would the Commission benefit from a longer-term viewpoint and approach to this issue if it were elevated and authorized in statute to a full advisory committee as opposed to a working group under an existing advisory council?

   Response: I fully agree with you that we must have a skilled, professional workforce capable of deploying broadband other modern communications infrastructure. When I recently re-chartered the FCC's Broadband Deployment Advisory Committee (BDAC), I created a working group—the Job Skills Working Group—to develop recommendations on this exact issue. The working group has a diverse cross-membership consisting of carriers, local governments, trade associations for carriers and manufacturers, academics, tower manufacturers, a union, representatives of four-year colleges and community colleges, and educational professionals with experience in adult education and career transitions.

   However, I believe that elevating the working group to a full Federal Advisory Committee is likely to slow down our efforts, rather than benefit them, thus delaying work on these important issues. First, agency staff already have solicited memberships for this working group, I have selected the members, and FCC staff have conducted the ethical vetting of members. Second, a working group is nimbler than a full Federal Advisory Committee, able to achieve at the working group level what can take a Full Advisory Committee many months longer. A working group can schedule meetings at any time and can meet as often as necessary. In contrast, Federal Advisory Committees can only meet after public notice of a full meeting has been published in the Federal Register with at least 15 days' notice before the meeting.

4. As you know, our valuable spectrum resources have only become increasingly important as more market entrants seek access to provide new or important services. Additionally, licensed, exclusive-use incumbents have enjoyed protections from harmful interference and an expectation of renewal—and they have traditionally been made whole for any transition to comparable facilities, both spectrum or otherwise.

   Consistent with the Commission's statutory mandate to assign licenses, "if public convenience, interest, or necessity will be served thereby…",[1] it is important for the Commission to have a full, robust record in order to make such a determination. With regard to the Commission's open proceeding on the 6 GHz band, have all interested

[1] 47 U.S.C. 307(a)

parties—including incumbents—fully participated in the Commission's process—whether through *ex parte* presentations, providing technical engineering studies to the Office of Engineering and Technology regarding the proposed Automatic Frequency Coordination mechanism, or filing in the record?

a. If an incumbent or other applicant seeking a license fails to participate in such a process subject to the satisfaction of the Commission, will you commit to basing any Commission action on the merits filed in record?

Response: Incumbents have been quite active in the Commission's rulemaking and numerous parties have continued to provide information through meetings with staff and *ex-parte* filings. And the Commission's decisions are always based on the record in the rulemaking proceeding.

5. While the Commission is not and should not be the lead Federal agency responsible for the cyber security of our communications networks, the Commission can still play an important role in the integrity and security of those networks. When it comes to 5G and next generation mobile networks, one of the principal ways to achieve security is through the adoption of open-source, merit-based, voluntary industry standards—like 3GPP or IEEE.

   However, our strategic competitors have begun to weaponize these international standards bodies to advance their security agenda, and the U.S. is at risk of failing to keep up with the scale and sophistications of contributions made by researchers and engineers from our strategic competitors. In order to maintain U.S. leadership, we must continue to send our best and brightest to these standards bodies to keep pace in leadership posts and merit-based contributions.

   To that end, what is the Commission doing to promote our U.S. industry in these conferences, and is there more the Commission could do to bolster these efforts?

   a. Who else should be involved in these efforts?

Response: The Commission is a member of 3GPP and has prioritized travel to 3GPP conferences and meetings in order to stay abreast of 3GPP activity and development of standards for 5G technology. 3GPP working group meetings cover much more than just security issues, and it is imperative that all of our federal partners, such as Department of Defense and Department of Homeland Security, are likewise involved in these meetings, specifically with an eye to cybersecurity and national security. To that end, the FCC has made staff available to our federal partners to share information from the myriad working group and plenary meetings held worldwide within 3GPP.

6. The Commission has been very vocal about the need for more mid-band spectrum in order to maintain U.S. leadership in 5G. While the Commission is contemplating action in the L-Band, 2.5 GHz, C-Band, and 4.9 GHz band, the CBRS Band is much further along to commercial deployment. Industry is ready to go, with several ESC systems approved and being deployed. Yet the Spectrum Access Systems are still awaiting FCC approval. What is the Commission's outlook on getting these final certifications finalized and getting the spectrum to market?

   Response: The Commission has made significant progress towards getting the 3.5 GHz Citizen's Broadband Radio Service up and running. We have been working closely with industry stakeholders and our federal partners at the National Telecommunications and Information Administration and the Department of Defense to enable new commercial operations in the 3.5 GHz band in the near future with potential commercial deployments later this summer. This process represents the successful culmination of an unprecedented collaboration between the Commission, industry, and our federal partners that will make a large swath of previously inaccessible mid-band spectrum available for innovative commercial broadband services.

Written Questions Submitted by Chairman Roger F. Wicker to Honorable Ajit Pai

Question 1. In her letter to you dated May 13, 2019, Sen. Cantwell references "an internal U.S. Navy action office-level working document." Was that document submitted to the FCC by the Department of Defense? If so, when and by whom? Does the document's analysis of "interference to weather satellites permitted by future commercial broadband uses at 24 GHz operating at the FCC's emission levels" contain sufficient information for the Commission to determine if its conclusions are reasonable and supported by sound analysis? If not, why not? Is it your understanding that the conclusions of this "an internal U.S. Navy action office-level working document" constitute an official position of the Department of Defense?

Response: Although we are aware of the referenced working-level document, it does not constitute an official position of the Department of Defense to our knowledge and has never been submitted by the Department of Defense to the Commission. Notably, that document contained no analysis of interference whatsoever; it instead analyzed potential operational impacts based on assumed harmful interference. Because a sound analysis of harmful interference in this band shows that the United States can both lead in 5G and protect our weather satellites (a position consistent with the views developed through the Interdepartment Radio Advisory Committee), the document's conclusions are quite mistaken.

Question 2. Senator Cantwell mentioned a number of issues in her opening statement characterized as "wireless and broadband companies already appear[ing] to be testing ways to undermine the free and open internet." Specifically, she mentioned: 1) "Comcast [being ordered] to pay $9.1 million in fines for deceptive practices that affected 50,000 Washingtonians since the repeal of net neutrality," 2) "CenturyLink temporarily blocking access to the internet in Utah to force consumers to watch ads," and 3) "Sprint allegedly interfered with competitive Skype services using wireless networks." To the extent you are aware of these issues, is there reason to believe they would have been likely to have constituted a violation of the FCC's Open Internet rules in effect before the *Restoring Internet Freedom order*?

Response: The FCC investigated and resolved the allegations regarding Comcast in 2016 under a different set of regulations (47 CFR § 76.981). I do not believe anyone understood Comcast's conduct to violate the *Title II Order*'s rules at the time.

My understanding is that the allegations against CenturyLink were the result of CenturyLink's attempt to comply with a Utah law requiring ISPs to offer content filtering for material harmful to minors and to notify customers in a conspicuous manner regarding the availability of such filtering. It is also my understanding that CenturyLink ended this particular method of notification due to customer dissatisfaction, and it has not been an ongoing problem. Thus, we have not analyzed whether its action would have violated the *Title II Order*'s rules. Additionally, with respect to the allegations against Sprint, we do not have sufficient evidence to determine that Sprint engaged in conduct violating the *Title II Order*'s rules. Moreover, my understanding is that Sprint has denied the allegations and that the researchers of the study alleging that Sprint discriminated against Skype acknowledged they themselves could not replicate the alleged conduct in the lab.

Question 3. In December 2018, you launched an investigation into whether carriers violated the Mobility Fund Phase II rules by submitting inaccurate coverage maps. What is the status of that investigation? At the conclusion of the investigation, will the Commission release an updated map of areas eligible for Mobility Fund Phase II support, or will a new data collection be necessary?

Response: Staff is actively wrapping up this investigation, and I hope that we will be able to report the results of that investigation soon. The Commission's next steps will depend on those results.

Question 4. Mid-band spectrum is critical to the U.S. winning the race to 5G. I know the Commission recently sought public comment on its authority to employ various clearing mechanisms to make C-band spectrum available for 5G. How soon do you expect the FCC will take action to make C-band spectrum available for 5G in an efficient and equitable manner? How will the Commission ensure that rural providers have access to C-band spectrum when it becomes available?

Response: I hope to move forward with an item addressing the C-band this fall. As part of our review process, Commission staff are specifically looking at how to ensure that rural providers have access to C-band spectrum when it becomes available, an issue we sought comment on in the Notice of Proposed Rulemaking.

Question 5. On January 1, 2017, a 32-day-blackout occurred between Cable One and Northwest Broadcasting. The blackout affected northern Mississippi where all four network channels for 21 counties were blacked out and another 16 counties only had access to ABC affiliate WABG. To the extent that you are aware of these issues, what, if any, oversight activity did the Commission engage in during this blackout?

Response: Under Section 325(b) of the Communications Act, parties to a retransmission consent negotiation are required to negotiate in good faith. The Commission implemented specific rules to outline what constitutes "good faith" negotiations and those rules are enforced through complaints. We generally encourage parties to come to an agreement as quickly as possible to mitigate the impact on consumers. Commission staff monitored this specific situation at the time it happened, but there was not a formal complaint filed with the Commission by either party.

Question 6. In December 2018, I wrote you a letter regarding SSR Communications Inc.'s 2013 petition for rulemaking to the FCC to create a new commercial FM class, referred to as the "Class C4 FM allocation." I appreciated your response to my letter in February. Please provide a status update on the FCC Media Bureau's efforts to review the comments submitted as part of the FCC's notice of inquiry and when we can expect further action.

Response: I agree with you that local radio stations provide essential service to their communities, and as Chairman I have worked to help bolster this important industry. As you know, I circulated a Notice of Proposed Rulemaking on this issue, but it was changed to a Notice

of Inquiry as a result of input from my colleagues. Commission staff continue to review the record developed in this proceeding, which includes balancing the benefits of the proposed power increases for some stations with the potential for increased harmful interference to others. My ability to move forward on this issue will also depend on whether a majority of Commissioners is willing to support such action.

Written Questions Submitted by Senator John Thune to Honorable Ajit Pai

Question. The 6 GHz band has a lot of potential for fulfilling the requirements under the MOBILE NOW Act, which was signed into law last year. How soon can the Committee expect the Commission to issue rules for this particular band?

Response: I agree that the 6 GHz band shows great promise in fulfilling the MOBILE NOW Act's directives. As you are aware, the Commission's October 2018 Notice of Proposed Rulemaking proposed allowing unlicensed use of the 6 GHz band while ensuring that the licensed services operating in the spectrum would continue to thrive. Now that the comment period has closed, we are reviewing the lengthy and complex record to determine the best method for minimizing potential harmful interference to the incumbents. At the same time, stakeholders continue to provide *ex parte* briefings concerning the issues raised.

I want to ensure that we have properly considered the outstanding issues and that the final rules are supported by a comprehensive and solid engineering analysis. We will proceed as expeditiously as possible toward a final resolution in this matter, and keep your office apprised of our progress.

Written Questions Submitted by Honorable Dan Sullivan to Honorable Ajit Pai

Question 1. As I've observed the Commission's work in my role as Senator for Alaska, I'm continually struck by what appears to be a lack of transparent, fair, due process for petitioners. I appreciated the Chairman's commitment during the hearing to circulate an order regarding GCI's Application for Review of the WCB's October 2018 determination of "rural rates." As you know, we have other highly consequential, outstanding items before the Commission. Please provide a status update on the following petitions, including a commitment on timeline for circulating the related orders –

▪ Maniilaq Association's appeal of USAC's denial of FY2017 FRNs

▪ Copper Valley Telephone Cooperative's Request for Review of USAC's denial of "Incorrect Treatment of Substantial Rent Expense Paid to an Affiliate"

Response: The Commission makes every effort to conclude its review of Universal Service support appeals as quickly as possible and in a fair and transparent manner. I have asked Commission staff to review promptly (while still thoroughly) both the Maniilaq Association appeal of its FY2017 USF Rural Health Care funding requests (filed on July 2, 2019) and the Copper Valley Telephone Cooperative's Request for Review of USAC's denial of support for certain of its expenses under the universal service high-cost program (filed on May 24, 2019). I can assure you that we will take into consideration the issues and concerns presented by all stakeholders in reaching a decision consistent with the Commission's rules and policies.

Question 2. As you are aware, Alaskan carriers rely heavily on the 3.7-4.2 GHz Band, referred to as the C Band. Last year, the Commission imposed a freeze on the filing of new license applications in the 3.7-4.2 GHz band, while the Commission considers potential reallocation of this spectrum for 5G use. The freeze is creating significant hardships for Alaskan schools, health care providers, businesses including telecoms that rely on C band satellite services for connectivity. Some applications to license C band satellite earth station sites in Alaska have been pending at the Commission for as long as a year. As you know, "construction season" in Alaska is short and limited to the summer months. We are now well into our second construction season without clarity or resolution.

What timeline can you commit to for processing these pending applications?

If the answer depends on the conclusion of the larger C Band proceeding ongoing at the FCC, when will that be complete?

Response: A number of carriers have asked the Commission to waive its temporary freeze on the filing of new earth station applications in the 3.7-4.2 GHz band to enable the construction and operation of new earth stations. As you note, the freeze was adopted to preserve the current landscape of authorized operations in that band pending Commission action on permitting terrestrial broadband use. At the same time, the Commission understands the critical role of C-band operations in Alaska, as well as the unique challenges presented by building and operating there. Thus, while future terrestrial use is one consideration in the review of the waiver applications, the answer does not depend on conclusion of the larger C-band proceeding; rather, Commission staff is carefully reviewing the record in each of these cases and weighing these

considerations under the waiver standard specified in our rules. We seek to resolve the waiver requests expeditiously and are considering the issues and concerns presented by the applicants, as well as the Commission's goal to expand flexible use of mid-band spectrum**.**

Question 3. On February 28, 2018, the Commission's Wireline Competition Bureau and Wireless Telecommunications Bureau released an order requiring Alaska Plan participants to submit highly detailed network maps. The Bureaus required that all of the network elements on these maps be certified as geospatially accurate to within 7.6 meters 95 percent of the time. Please provide in full and with appropriate citations: (1) the Bureaus' stated justification for requiring this level of accuracy as opposed to some lower level of accuracy, (2) the cost-benefit analysis the Bureaus relied on for requiring this level of accuracy as opposed to some lower level of accuracy, and (3) specific examples of other contexts in which the Commission has imposed such stringent mapping requirements.

As you know, the Alaska Plan participants did not object to the obligation to submit network maps. Certain Alaska Plan participants, however, did seek a waiver of the 7.6 meter accuracy standard for certain network elements, including buried fiber that may be dozens of miles or more from the nearest customer or wireless antenna. The Bureaus denied the waiver request and an application for review has been filed. Please commit to a date certain by when you will circulate to the full Commission a draft order proposing to address the pending Application for Review.

Response: The Wireline Competition Bureau and Wireless Telecommunications Bureau affirmed the 7.6-meter accuracy standard in the February 28, 2018 *Order on Reconsideration*, finding that the 7.6-meter standard "provides an important backstop to ensure carriers maximize their commitments and service" and is "necessary for the Bureaus to maintain compatibility with the census boundary and road data for the census-block based Alaska Plan."[1] The Bureaus concluded the standard "is critical for obtaining a complete picture of facilities' locations in relation to other existing data" and to identify duplicative facilities.[2] Notably, no carriers sought review of the February 28, 2018 *Order on Reconsideration*; in fact, most carriers subject to the requirement have already fully certified to the 7.6-meter accuracy standard.

Additionally, the 7.6-meter standard is fairly widely used; for instance, the Commission has used it in the context of its high-cost data to account for inherent error in census block measurements, and the Census Bureau also uses the same standard.

To be sure, one Alaska Plan recipient has a remaining objection relating to this requirement. That recipient, GCI, receives more than $58 million every year under that Plan, an amount that is substantially larger than that received by any other participant in the Alaska Plan (most of whom, again, have already apparently complied with the requirement). What is more, GCI's remaining application for review extends from a waiver request that came more than a year after the *Order on Reconsideration*. GCI did not provide a cost estimate regarding how much more it would cost to comply with the mapping data requirement or explain why it did not adequately

[1] *Connect America Fund–Alaska Plan*, Order on Reconsideration, 33 FCC Rcd 2068, 2075-77, paras. 19-22 (WCB, WTB 2018).

[2] *Id.*

document the location of fiber it deployed in 2018 after it was made aware of the 7.6-meter standard. The Commission is analyzing the arguments raised in GCI's Application for Review of the *Waiver Denial Order*,[3] and the relevant record is being studied by staff. I expect they will present me a recommendation on how to proceed in the coming months.

[3] *Connect America Fund–Alaska Plan* Order, 34 FCC Rcd 1045 (WCB, WTB 2019) (Waiver Denial Order).

Written Questions Submitted by Senator Mike Lee to Honorable Ajit Pai

Question 1. During the hearing, we began a conversation regarding a definition of the term "digital divide." During this exchange, you noted that such a definition would include any type of application that broadband would allow, including "access to entertainment."

A. If the term "digital divide" is determined by such continually evolving categories like "entertainment" or "any type of application that broadband would allow" is it possible to ever close the "digital divide"?

Response: Although precisely defining the term "digital divide" is no doubt a difficult task, I believe closing it must be our priority. To me, that means helping to make high-speed broadband available to every American who wants access to the Internet. I have seen for myself in 45 states, including Utah, and the territories of Puerto Rico and the U.S. Virgin Islands what affordable high-speed Internet access can do for a community—for its families, its schools, its hospitals, its farms, its businesses—as well as the impact of its absence. High-speed Internet access is critical to economic opportunity, job-creation, education, and civic engagement. That's why we have encouraged carriers to replace aging copper with fiber on an expedited basis, modernized our rules to reduce barriers to infrastructure investment, and held our nation's first reverse auction for fixed broadband support, among many other things. The results of these actions will be felt throughout America, and especially in rural America, where the case for building out broadband is already challenging for many businesses.

Question 2. As you know, Section 706 requires the FCC to determine whether "advanced telecommunications capabilities" are being deployed in a timely and reasonable fashion. The metrics used, like the setting of the broadband speed, are important because such determinations can trigger substantial FCC authority.

A. Can you identify any limits as to how the FCC establishes the metrics used to make Section 706 determinations?

Response: Under the prior Administration's interpretation, there were no limits to the statutory language in section 706, and thus to the FCC's authority under that statute. The previous FCC not only set an impossibly high bar for determining whether "advanced telecommunications" were being deployed, it then found section 706 to be an authority-granting statute that imbued the Commission with vast regulatory powers.

We have rejected an interpretation of section 706 that is so elastic as to render limits meaningless. *First*, we have recognized that the words of the statute mean what they say: We must assess progress in broadband deployment (whether advanced telecommunications capability "*is being deployed* to all Americans in a reasonable and timely fashion" (emphasis added))—not that every single American across the country has broadband at this very moment. *Second*, we have recognized that people use the Internet in various ways, so we have adopted a holistic approach under which we examine progress in multiple speed tiers and types of services. *Third*, we have re-established the proper understanding of section 706—it is not an authority-

granting statute but a hortatory statute that, should the Commission make a negative finding on the deployment of advanced telecommunications, simply exhorts the Commission to use its preexisting authority to deregulate (not heavily regulate) and spur competition.

Question 3. The Connect America Fund (CAF) is a federal program that gives subsidies to companies to build networks in high cost areas. You've made a number of recent changes to the CAF program, including increasing the target speeds to 25/3 Mbps.

A. Does increasing target speeds under CAF affect the overall cost for a carrier to deploy a network? If so, what would those costs be?

B. How would increased carrier costs affect the overall CAF budget as well as the larger Universal Service Fund (USF) budget? Will these requirements necessitate increases to the CAF budget and the overall fees for consumers?

C. The USF is funded by fees placed on Americans. These fees are generally regressive and affect lower- and middle-income Americans more than higher earners. Could these requirements increase USF costs to American consumers?

Response: Increasing speed targets under the CAF doesn't necessarily increase meaningfully the overall costs to deploy a network. For example, fiber networks are generally capable of providing service at various speed tiers for negligible marginal-cost differences—so increasing speed requirements for such builds generally benefits the consumer without significantly increasing the cost to the recipient or the taxpayer.

The Connect America Fund Phase II reverse auction, part of our broader effort to close the digital divide in rural America, is a great example of targeting finite USF funds to connect unserved areas with high-quality services in an efficient manner. Through this novel approach, we're now awarding about $1.5 billion to connect over 713,000 unserved homes and businesses nationwide. The Commission distributed funding much more efficiently thanks in part to intermodal, competitive bidding, saving $3.5 billion from the $5 billion price we initially thought would be required to connect these unserved areas. And consumers will receive high-quality broadband—99.7% of the winning bids are to provide consumers with service of at least 25/3 Mbps, and over half are receiving service of 100/20 Mbps or better.

Question 4. The FCC is currently working on a rule related to reforms of Section 621 or the regulations governing the issues of franchises for cable operators.

A. Can you share an update on the timing for the rulemaking as well as any particular findings on how the current cable franchise framework affects cable operators, including the overall costs for broadband deployment?

Response: The Commission is scheduled to vote on a Third Report and Order in this proceeding to resolve the pending rulemaking at its August open meeting. A draft of this item was made public last week and is currently available for review on our website. The pending proceeding is a direct result of a 2017 remand by the U.S. Court of Appeals for the Sixth Circuit in *Montgomery County, Md., et al v. FCC*. The item, if adopted, would reach the following

conclusions. *First*, we would conclude that cable-related, "in-kind" contributions required by a cable franchising agreement are franchise fees subject to the statutory five percent cap on franchise fees set forth in section 622 of the Communications Act, with limited exceptions, including an exemption for certain capital costs related to public, educational, and governmental access (PEG) channels.[4] *Second*, we would find that under the Communications Act, local franchise authorities (LFAs) may not regulate the provision of most non-cable services, including broadband Internet access service, offered over a cable system by an incumbent cable operator. *Third*, we find that the Communications Act preempts any state or local regulation of a cable operator's non-cable services that would impose obligations on franchised cable operators beyond what Title VI of the Act allows. *Finally*, we would conclude that Commission requirements that concern LFA regulation of cable operators should apply to state-level franchising actions and state regulations that impose requirements on local franchising. I believe the Third Report and Order not only faithfully interprets the Communications Act but will also curtail practices of LFAs and other state and local entities to circumvent the franchise fee restrictions of the Communications Act. For example, the record shows that some entities are requiring cable operators to pay additional fees for the provision of non-cable services, a practice which is prohibited by the Communications Act. I expect that ending this practice will result in lower costs for consumers and additional investment in broadband networks, which will serve the public interest.

[4] 47 U.S.C. § 542.

Written Questions Submitted by Senator Ron Johnson to Honorable Ajit Pai

Question 1. As you know, I, along with my colleagues in the Wisconsin delegation, sent you a letter regarding the importance of accurate broadband maps for our state. I appreciate your quick response to that letter and am glad to hear this is a shared priority of ours. At the hearing, you made two great announcements –1) plans for a $20 billion investment in rural broadband, known as the Rural Digital Opportunity Fund, and 2) plans to move forward with a broadband mapping proposal in August.

a. Do you agree that the FCC must first improve its broadband maps to ensure that this valuable funding goes to the places that need it most?

b. Will your mapping proposal ensure that the maps will be promptly updated so that the new program is not delayed?

Response: I agree that using updated and accurate broadband deployment data is critical to accomplishing the goal of making broadband available to all Americans, regardless of where they live. We need to understand where broadband is available and where it is not to target our efforts and direct funding to areas that are most in need. That is why the Commission began a top-to-bottom review of our deployment data collection to ensure that broadband data will be more precise, granular, and ultimately useful to the Commission and the public. I have circulated a Report and Order for the FCC's upcoming monthly meeting on August 1. That Report and Order would yield more granular and more accurate broadband maps. It also would provide for regular updates of the filed data to ensure that the maps we rely on are current. These updated maps would be used to focus funding to expand broadband through future initiatives such as the second phase of the proposed Rural Digital Opportunity Fund (RDOF). Once implemented, the RDOF would provide over $20 billion over the next decade to connect millions of rural homes and businesses to high-speed broadband, representing the FCC's single biggest step yet to close the digital divide.

Question 2. I understand there are a few proposals to fix this problem, including having providers submit "shapefiles" showing their actual service areas. This is not a new idea. In fact, some states and the Rural Utilities Service have already been using "shapefiles" showing providers' actual service areas to produce more accurate maps. Additionally, I understand USTelecom is currently piloting another method for collecting mapping information called "broadband serviceable location fabric."

a. Is the FCC considering these ideas as part of its Report and Order?

b. Is Congressional action needed to support the FCC's mapping goals?

Response: The item that I circulated for the August Open Meeting, if adopted, would require broadband providers to report where they actually offer service below the census block level, including by submitting broadband coverage polygons (similar to shapefiles). The item also provides for incorporating public feedback into our mapping efforts. Lastly, the draft item I circulated seeks comment on how we could incorporate the fabric or similar location data into the new maps. I welcome your support for this project and look forward to continuing to work with you on our shared goal of improving the Commission's broadband coverage maps.

Written Questions Submitted by Senator Todd Young to Honorable Ajit Pai

Question 1. Chairman Pai, I want to first ask a couple of questions about the 24 GHz auction and the process that has undertaken.

Please describe what you believe to be the flaws in the Department of Commerce's study that claims 5G services in the 24 GHz band would cause harmful interference to weather sensors.

Interagency disagreements like this on the 24 GHz auction could send a message abroad that the U.S. government isn't speaking within one voice when it comes to spectrum policy. What risks do we face at the World Radiocommunication Conference later this year if the U.S. doesn't speak with a unified voice on spectrum policy?

Response: Unfortunately, the emission limits most recently advanced by the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) and the National Aeronautics and Space Administration (NASA) are based on an unvalidated and badly flawed study. As just one example, international guidance from the ITU suggests that analyses should be based on the adaptive array antennas (beamforming) expected to be used in this spectrum. (To roughly describe the concept, think of beamforming as a laser sending a single discrete pulse of light, instead of a regular light bulb sending streams of light everywhere.) These adaptive array antennas are one of the innovations that make mobile 5G in millimeter-wave bands possible. They significantly reduce the impact of commercial 5G operations on passive weather satellites. And yet, NOAA did not use such antennas in its study.

There are many other problems with the study. It assumes base stations and respective user equipment are transmitting at the same time, which is impossible under Time Division Duplex (TDD) systems that will be used for 5G services. It overestimates both the quantity of and power from base stations and user equipment. It does not adequately take into account "clutter," that is, the effects of buildings and trees that would block potentially interfering signals. And the wireless deployment scenarios the study uses are not consistent with any reasonable expectation of how 24 GHz band spectrum will actually be used. These and other flaws exist despite international guidance that any study methodology should include appropriate and reasonable input parameters.

Just as importantly, the most recent study has not been vetted through any public process, including through the ITU processes other studies have gone through. Indeed, the FCC staff was prevented from conducting a thorough review until May 10, 2019, when NASA finally provided the code for review after repeated requests by NTIA and FCC for the underlying study simulation. Only then, two months ago, could the FCC undertake an informed and detailed analysis of the study for the first time.

Such input from stakeholders, including the technical experts with the Commission, is critical for a study to be validated. FCC review has already revealed the substantial impact of the study's known flaws. And this review process is especially important since NOAA's prior study on this issue was withdrawn and abandoned by NTIA earlier this year due to flaws uncovered by the FCC and industry participants.

I strongly agree that the U.S. must speak with a unified voice internationally. If we do not, there are several risks. First, we raise the chances that the WRC-19 process results in spectrum policies that do not allow American companies to fully develop and deploy 5G services and

applications and do not enable American consumers to be among the first 5G beneficiaries. And second, to the extent that the United States would be bound by a decision made at the WRC-19, that decision could well override domestic rules and policies and be based on unsound scientific and engineering analysis—each of which would set a bad precedent for the future.

The bottom line: the FCC looks forward to advancing U.S. positions for the WRC-19 that will advance U.S. leadership in 5G and protect passive weather services in the 24 GHz band. Based on the ongoing work of the Commission's spectrum engineering experts, we do not need to choose between 5G and critical weather forecasting tools. Sound and sober engineering analyses lead us to the firm belief that the United States can have both.

Question 2. Chairman Pai, U.S. intelligence agencies allege that Huawei and ZTE are linked to the Chinese government and their equipment could contain "backdoors" for Chinese intelligence. To address the concern, President Trump issued an Executive Order prohibiting the acquisition and installation of telecommunications technology that are determined to be a threat towards national security. With the FCC starting to consider how to apply the ban, rural carriers are now facing uncertainty.

Can you explain the "rip and replace" process and how it might affect rural carriers and their infrastructure? Furthermore, what do you believe would be the overall cost to replace Huawei, ZTE and other equipment?

Response: National security threats posed by certain communications equipment providers have long been a matter of concern to both the Executive Branch and Congress. In April 2018, the Commission adopted a Notice of Proposed Rulemaking proposing to restrict use of universal service funds prospectively to purchase or obtain any equipment or services produced or provided by any company posing a national security threat to the integrity of communications networks or the communications supply chain. The NPRM seeks comment on ways to determine which companies pose a national security threat to communications networks or the communications supply chain, including approaches based on existing legislation (such as the Spectrum Act of 2012 and the National Defense Authorization Act for Fiscal Year 2018), as well as approaches that would rely on other federal agencies to maintain a list of suppliers that they believe pose national security threats to U.S. communications networks. The NPRM also sought comment on the potential costs associated with the proposed rule.

Last October, the Bureau sought comment on the applicability of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 to the Commission's NPRM and the Commission's universal service programs. Some commenters have suggested carriers will need to remove and replace equipment purchased from entities determined to pose a national security threat to communications networks or the communications supply chain—but we have yet to find hard data on the costs of such a rip and replace process. The comment cycles have been completed and Commission staff is carefully reviewing the record in these proceedings, as well as the potential implications of the recent Executive Order.

Question 3. Chairman Pai, millions of rural Americans lack access to fixed high-speed broadband, which in today's economy is perceived as basic infrastructure. In the FCC's 2019 Broadband Deployment Report, the FCC concluded that broadband is being deployed to all

Americans, including rural Americans, in a timely fashion. The report also asserted that FCC policies are promoting investments and removing burdensome barriers.

Given the ongoing growth in private investments, what are the FCC's priorities moving forward to ensure U.S. broadband providers have the resources they need in the free market for continued investments in rural America?

Additionally, how will the FCC continue to update its mapping to provide an accurate account of high-speed service?

Response: The Commission has taken many steps to better enable the private sector to deploy broadband infrastructure. For example, last year, we made it easier and cheaper for competitive providers to attach fiber to utility poles through a groundbreaking reform called "one-touch make ready." We've also modernized rules that delay service providers from replacing outdated facilities with modern technologies like fiber. In March, we re-chartered the Broadband Deployment Advisory Committee (BDAC). In its second term, the BDAC will continue its work to craft recommendations for the Commission on how to accelerate the deployment of high-speed broadband, including ways to reduce and remove regulatory barriers to infrastructure investment, increase deployment and availability of broadband to low income communities, and train the workforce needed to deploy next generation networks.

We also need to understand where broadband is available and where it is not to target our efforts and direct funding to areas that are most in need. That is why the Commission began a top-to-bottom review of our deployment data collection to ensure that broadband data was more accurate, granular, and ultimately useful to the Commission and the public. After a thorough review of the record and the painstaking work of our career staff, I circulated a Report and Order for consideration at the FCC's August Open Meeting that would result in more granular and more accurate broadband maps through the creation of the Digital Opportunity Data Collection. That means requiring broadband providers to report where they actually offer service below the census block level and incorporating public feedback to ensure up to date and accurate broadband deployment maps.

United States Senate Committee on Commerce, Science, and Transportation Committee
"Oversight of the Federal Communications Commission"
June 12, 2019
Questions for Chairman Pai

Questions for the Record from Senator Schatz

1) PEG channels are a critical way for the public to stay informed and engaged in their local communities. Access to PEG programming is particularly important to maintain media diversity, local content, and government transparency in Hawaii and around the nation. So, I am troubled by the proposal currently under consideration in the Second FNPRM in MB Docket No. 05-311, which I have been told could drastically impact the quality and availability of PEG channels and programming.

   I understand that the FCC has not yet ruled in this proceeding, but you have been a strong proponent of data-based decision making and conducting cost-benefit analyses. As such, I expect that you will collect and use robust and reliable data to evaluate your decision on this issue. Has the FCC collected data about the likely impact of this proposal on PEG channel and programming availability? Please provide the current and historical data the FCC is considering that detail the levels of actual and/or estimated in-kind contributions for PEG channel capacity and equipment. What percent of actual contributions for PEG channel capacity and equipment do you assume that cable providers will deduct from their franchising fee requirements? How did you determine these contribution levels? What other essential data points is the FCC evaluating in its cost benefit analysis? Has the FCC's Office of Economics and Analytics done a specific report on this proceeding in which it analyzes this and all other relevant data upon which the Commission intends to base its decision? If so, please provide a copy, and if not, why not? Please provide all of the relevant data that the FCC is considering in its analysis and, whenever possible, please provide Hawaii specific information in addition to national averages. If the data and analyses requested in this question is not available, will you commit to delaying circulation of a report and order in the docket until you have collected it and provided it to my staff?

RESPONSE: I appreciate your questions regarding this proceeding. As you may be aware, the Commission adopted a Third Report and Order in this proceeding on August 1, 2019. For your convenience, I have included a copy of the final document as adopted. As the Commission's 74 pages of painstaking analysis, and my own separate statement make clear, this decision was driven primarily by the statutory framework outlined by Congress in the Communications Act—namely, Section 622's five-percent cap on franchise fees that local franchise authorities may collect from cable operators. As I observed in my statement, to the extent that those who disagree with the decision on policy grounds want a different result, "[t]he solution is simple: change the law. The job of administrative agencies like ours is not to rewrite laws set forth by Congress. It is to implement those laws. As the Supreme Court has opined, '[u]nder our system of government, Congress makes laws and the President, acting at times through agencies . . . , 'faithfully execute[s]' them. The power of executing the laws . . . does not include a power to

revise clear statutory terms [quoting *Utility Air Regulatory Group v. EPA*, 573 U.S. 302, 327 (2014)]."

With respect to one issue you raise, the Commission's Office of Economics and Analytics did review the draft item prior to circulation, but as is generally the case, did not write an additional written report. Indeed, as indicated above, the primary issues in this proceeding involved statutory interpretation. Please feel free to reach out if you would like to discuss this issue further.

Questions for the Record from Senator Tester

1) The FCC's Captioned Telephone Services gives folks independence to connect with the world. I support the FCC's intention to ensure this program can handle the influx in participates, however I am concerned about using an automatic speech recognition to replace humans. What is the Commission doing to ensure this technology is adequate and the quality of this service does not decrease?

RESPONSE: I agree that IP CTS is a critical service for individuals with hearing loss. As you know, the vast majority of captioned telephone services already rely on automated speech recognition. However, those services have previously required the interposition of a communications assistant between the caller and the speech recognition software to "revoice" a caller's words. This interposition slows transcription, reduces the privacy of calls for callers, and increases the costs of IP CTS. That's why the Commission took steps to modernize IP CTS in June 2018 when we authorized the use of automated speech recognition without a communications assistant. We found that such automated speech recognition has become a viable alternative with its improvements in accuracy, speed, and privacy. Additionally, consumers will continue to be able to select a provider based on quality of service and other available methods, as automated speech recognition will not be the sole means of offering IP CTS. Finally, I want to stress that nothing regarding our reforms allows substandard service: Providers using automated speech recognition must continue to meet the Commission's minimum standards and report data to the Commission to help us determine if further measures are necessary.

2) I am also concerned that reforms to this program would require candidates to travel to their State equipment distributor to receive certification instead of from their physician. As you move forward, will you take into consideration what impact this will have on folks in rural America?

RESPONSE: Yes. Coming from rural Kansas, I am always mindful of the impact of our decisions on rural Americans.

3) According to your Report on Broadband Deployment in Indian Country, less than half of homes on rural reservations have access to that same level of broadband service. What are your recommendations for Congress on how to help?

RESPONSE: Although broadband deployment to Tribal lands has increased in recent years, it is clear that more work needs to be done to bridge the broadband gap in Indian Country. While we did not provide specific recommendations for Congress in our recent report, the Commission has taken measures to ensure that Americans living on Tribal lands have access to broadband. We recently authorized more than $4.1 million in CAF II auction support over ten years to the Northern Arapaho Tribe to deploy gigabit-speed broadband to 849 rural homes and small businesses on the Wind River Reservation in Wyoming. And earlier this month, the Commission proposed the Rural Digital Opportunity Fund, a $20 billion reverse auction that would help deploy broadband for millions of unserved Americans that included proposals to ensure that sufficient funding is directed to Tribal lands, such as using a Tribal Broadband Factor and Tribal bidding credits and prioritizing support to areas that do not yet have access to 10/1 Mbps services. We are ready to work with your office and others in Congress to continue to address this important issue.

4) Consultations play such an important role, is the FCC's office of Native Affairs and Policy adequately staffed?

RESPONSE: Yes. Within the Bureau, the Office of Native Affairs and Policy (ONAP) greatly benefits from the synergies with other components of the Consumer and Governmental Affairs Bureau (where ONAP itself is located), including routine coordination with intergovernmental staff in the Office of Intergovernmental Affairs and other Bureau-level specialists. In addition, ONAP regularly coordinates with subject-matter experts in the Wireless Telecommunications Bureau, the Wireline Competition Bureau, and the Media Bureau, as well as the Office of Engineering, Office of Economics and Analytics, and Office of Managing Director on items of significant Tribal interest.

5) Do you have any updates on the progress of the Native Nations Communications Task Force?

RESPONSE: I personally have met with the Task Force and informed them of our shared goal to boost connectivity on Tribal lands. The Task Force held its most recent in-person meeting on June 11 in Oklahoma, and has additional meetings planned for November 5-6. The Task Force continues to work on its mission to provide guidance, expertise, and recommendations to specific requests from the Commission on a range of communications issues that directly or indirectly affect Tribal governments and their people.

6) Do you believe we need to remove existing Huawei equipment from our telecommunications infrastructure?

RESPONSE: The Commission has an ongoing proceeding involving the Universal Service Fund to evaluate the steps necessary to secure the integrity of our communications supply chain and ensure the security of equipment already installed by domestic communications providers. We have not yet made any final decisions in this proceeding, but I can assure you of my strong belief that we must protect the national security interests involving our communications infrastructure.

Questions for the Record from Senator Duckworth

1) Regarding 5.9 GHz band use, what is the Commission doing to make sure it gathers all the engineering and economic information it needs to decide between the various proposals on the record?

RESPONSE: For two decades, the Commission's rules have only permitted one technology—Dedicated Short-Range Communications or DSRC—to be used in the 5.9 GHz band. Given the importance of ensuring that spectrum use is maximized, the Commission, in 2013, began exploring the possibility of expanding the 5.9 GHz band to include unlicensed devices. Since that time, the Commission has built an extensive record from a variety of stakeholders, including automotive companies and unlicensed device advocates. The Commission has explored the feasibility of a variety of band sharing proposals to determine the best course of action for this spectrum band.

In 2016, the Commission released a Public Notice to refresh the record, gather specific comment on various proposed sharing plans, solicit prototype unlicensed devices for testing, and seek comment on a three-phase test plan for those prototype devices. Subsequently, the FCC, along with NTIA and the U.S. Department of Transportation, collaborated on executing Phase I of the test plan. In 2018, the Commission's Office of Engineering and Technology released its Phase I Test Report and solicited comments. The Commission continues to work with DOT and NTIA on Phase II (limited field testing) and Phase III ("real-world" testing). Additionally, the Commission continues to engage stakeholders and attend related fora to ensure it has the most up-to-date and relevant information regarding vehicular and unlicensed device needs so it can make the best decision for ongoing and future use of this spectrum.

2) Regarding the Rural Digital Opportunity Fund, can you provide a more specific timeline regarding when the FCC plans to the auction? Are there any specific issues or obstacles to implementation?

RESPONSE: On August 1, the Commission adopted a Notice of Proposed Rulemaking proposing to establish the Rural Digital Opportunity Fund. This modernized approach for connecting the hardest-to-serve corners of our country will be the biggest step the Commission has yet taken to close the digital divide, including the gaps I've seen for myself in places like downstate Illinois.

Building on the success of the CAF Phase II auction, the Rural Digital Opportunity Fund would make available more than $20 billion to support up to gigabit-speed service to millions of unserved Americans through a competitive auction that will ensure that unserved Americans will be covered for the lowest cost possible. It would target support to areas that lack access to fixed voice and 25/3 Mbps broadband and would be implemented through a two-phase approach. Phase I would allocate support to wholly unserved census blocks—those areas where existing data show there is no service at all—while Phase II would allocate support to unserved locations in partially unserved census blocks once the Commission has more granular broadband availability data, along with areas not won in Phase I. Our aim is to begin the auction process for Phase I next year. The primary issues regarding implementation involve administrative steps required to finalize the auction process (that is, moving from a Notice of Proposed Rulemaking to a final Order) and complexities with respect to designing and conducting the auction. I am

confident in the ability of FCC career staff to enable us to conduct a successful auction that will bring millions more Americans online.

3) In the FCC's E-rate and Rural Health Care programs, long-term consortium contracts are an effective method for ensuring broadband providers meet buildout and service obligations to all covered anchor institutions. Has the FCC considered whether long-term contracts between rural governments (i.e. county-level or municipal) and broadband providers could be similarly effective in solving the residential broadband gap?

RESPONSE: Although the Commission has not previously examined such contracts, that is an interesting idea that may be worth exploring.

Questions for the Record from Senator Baldwin

1) I understand from stakeholders in Wisconsin that USAC has issued guidance on the treatment of A-CAM locations that are home-based businesses which conflicts with the FCC's rules. Such confusion among A-CAM recipients on what qualifies as a "location" is leaving many rural broadband providers in an uncertain position regarding meeting the agreed-upon service targets for broadband deployments and is having a chilling effect on companies considering taking an A-CAM II offer.

   It is my understanding that a Petition has been filed seeking clarification or Declaratory Ruling that the guidance issued by USAC will not supersede FCC rules. Can you provide an update on when the FCC will clarify its treatment of home-based businesses by asking USAC to update its guidance and, if not, when the FCC will seek comment on the Petition?

RESPONSE: As you note, Northeast Iowa Telephone Co. and the Western Iowa Telephone Association recently filed a joint petition concerning the definition of "location" under the Alternative Connect America Cost Model for residences that also include a home-based business. On June 20, 2019, the Wireline Competition Bureau sought comment on the petition. The record closed on July 25, and Commission staff is now carefully reviewing that record.

2) Congress passed the National Suicide Hotline Improvement Act (P.L. 115-233) last year, which tasks the Federal Communications Commission (FCC) with studying the feasibility of transitioning the 1-800 number to a single-use N11 code. Furthermore, it asks FCC to consider recommendations surrounding improved infrastructure and operations. As you may know, the lesbian, gay, bisexual, transgender and queer (LGBTQ) community, particularly LGBTQ youth, is disproportionately affected. Lesbian, gay and bisexual youth seriously contemplate suicide at almost three times the rate of heterosexual youth, while more than a third of transgender adults reported making a suicide attempt prior to the age of 25.

   Given that the LGBTQ population is at a heightened risk for suicide, I am requesting a status update on the following:

   a. What is FCC doing to address the concerns raised by over 100 commenters to its open docket to consider the need for specialization of services for LGBTQ populations in relation to implementation of the Hotline Improvement Act?

   b. Has FCC considered, as an infrastructure or operational improvement, the mandatory training of counselors for identifying and responding to LGBTQ youth in crisis, or the set-up of an Integrated Voice Response (IVR) to send LGBTQ callers to organizations with particular expertise in serving these communities?

   c. Does FCC plan to vote on these recommendations and allow Commissioners to make amendments to the report?

RESPONSE:

The Commission's Wireline Competition Bureau and Office of Economics and Analytics submitted the report required under the National Suicide Hotline Improvement Act of 2018 to Congress on August 14, 2019. The report reflects consultation with the Department of Health and Human Services' Substance Abuse and Mental Health Services Administration (SAMHSA),

the Department of Veterans Affairs (VA), and the North American Numbering Council, as required under the statute.

The report finds that (1) designating a 3-digit dialing code dedicated solely for the purpose of a national suicide prevention and mental health crisis hotline would likely make it easier for Americans in crisis to access potentially life-saving resources; and (2) the Commission should initiate a rulemaking proceeding to consider designating 988 as the 3-digit code to be used for this important purpose.

The report also recognizes that suicide rates are higher across various at-risk populations and that some commenters have advocated for the need for specialized hotline services for such populations, including LGBTQ youth and Veterans. As you and other commenters have indicated, these specialized services could include establishing an interactive voice response system to a group that has the resources and expertise to best serve LGBTQ youth and for specialty partners across all at-risk groups to assist SAMHSA in conducting further training to increase the ability for existing counselors to best serve callers. The report finds that the need for specialized hotline services for at-risk populations, including LGBTQ youth and Veterans, should be a factor for (1) SAMHSA, the VA, and Congress when considering any improvements to the National Suicide Prevention Lifeline; and (2) the Commission as it considers designating a 3-digit dialing code for a national suicide prevention and mental health crisis hotline.

I appreciate the importance of such a hotline for LGBTQ individuals and have met with various stakeholders, including The Trevor Project, to hear their views. I am committed to launching a rulemaking proceeding in which the Commission would consider designating a 3-digit number—specifically, 988—for a national suicide prevention and mental health crisis hotline. All interested stakeholders will be invited to fully participate and provide further public comment in that proceeding.

Questions for the Record from Senator Udall

1) There was a significant outage of the CenturyLink broadband network, which caused the Verizon Wireless to also go out, right after Christmas last year that impacted many New Mexicans, including essential business operations because businesses were unable to process credit card payments. Is the FCC currently reviewing this outage? Has the FCC issued any guidance or taken any enforcement actions against companies that fail to maintain resilient networks?

RESPONSE: As I have emphasized, Americans must have access to essential communications networks in times of emergencies, including natural disasters. Maintaining and restoring these vital networks must be a priority. The Commission has completed its investigation of the December 27, 2018, CenturyLink network outage, and a final report will be released very soon. I should also note that the Commission does not comment on potential enforcement matters.

2) I along with other members of this Committee have been vocal about the need for a dedicated tribal broadband fund. I am aware that there have been incremental changes, including lifting the operating expenses caps for some tribal carriers. But these are insufficient to truly meet the need for serving tribal lands. The FCC recently published a report that had been mandated in the 2018 RAY BAUM Act. The report discussed the 25 percent discount given to tribal-serving carriers in the Alternative Connect America Cost Model or A-CAM methodology, and stated that a fund for legacy carriers is out for public comment. Mr. Chairman, our communities are tired of waiting for comments. They want action. When will the FCC move on this proposal?

RESPONSE: Having been to Tribal areas where access is challenging—like the Rosebud Sioux Reservation in South Dakota to the Navajo Nation in Arizona—I have made closing the digital divide on Tribal lands a priority and the Commission has taken significant steps toward that goal. In last year's CAF II reverse auction, winning bidders committed to serve 76,710 rural homes and businesses on Tribal lands, and Tribally owned carriers—like the Northern Arapaho Tribe, which is receiving more than $4.1 million to deploy gigabit-speed fiber to 849 homes and businesses on the Wind River Reservation in Wyoming—won bids totaling more than $30 million in broadband support. And as you noted, we proposed a 25% Tribal broadband factor for the second A-CAM offer, which generated significant interest from carriers serving Tribal lands, and we sought comment on incorporating a similar Tribal support factor into our existing support mechanism for legacy carriers. This month, the Commission voted to propose the Rural Digital Opportunity Fund, a $20 billion investment in high-speed broadband for rural Americans, and we sought comment on several steps to target new funding to Tribal lands, including applying the Tribal Broadband Factor to increase support available, prioritizing support to areas that lack even 10/1 Mbps broadband, and offering a Tribal bidding credit to induce participation on Tribal lands. I look forward to working with you and my colleagues to ensure that those in Indian Country get access to the digital opportunities they need and deserve.

3) Tribal communities continue to lag behind the rest of the country in the deployment of broadband. The GAO found that inaccuracies in FCC broadband data have led to underestimates of the magnitude of the digital divide on tribal lands. So we may not even have a clear picture as to how wide that gap really is given the current data collection regime. What changes is the FCC considering as part of its efforts to modernize FCC

form 477 in order to specifically address the under-reporting in Tribal communities? What are some ways that the FCC can look outside the beltway to engage on this issue?

RESPONSE: Obtaining and using precise, accurate, up-to-date broadband deployment data is critical to accomplishing the goal of making broadband available to all Americans, including Tribal communities. We need to understand where broadband is available and where it is not to target our efforts and direct funding to areas that are most in need, such as many rural, Tribal areas.

That is why the Commission began a top-to-bottom review of our broadband deployment data collection to ensure that that data will be more precise, granular, and ultimately useful to the Commission and the public. Along those lines, the Commission adopted a Report and Order on August 1 to create the Digital Opportunity Data Collection, a new approach to mapping fixed broadband in which providers submit geospatial polygons depicting their broadband deployment and thereby yielding more granular and more precise broadband maps. That Report and Order also provides for regular updates of the filed data to ensure that the maps we rely on are current. The Report and Order also adopted a mechanism for verifying those maps through crowdsourcing—feedback directly from the public. Through this new tool, Tribal governmental entities (among others) will be able to submit information disputing providers' fixed broadband availability data, leveraging their experience concerning service (or the lack thereof).

The concurrently-adopted Further Notice of Proposed Rulemaking seeks comment on how best to incorporate input of Tribal governments on broadband coverage maps. For example, the Further Notice proposes outreach directly with Tribal governments to facilitate their involvement in the dispute process and to provide technical assistance to them as needed. The item also seeks comment on any additional issues specific to Tribal governments that we should consider in connection with any disputes concerning coverage data. Finally, it seeks comment on whether we should expand these proposals to include other Tribal entities, such as inter-Tribal organizations.

4) President Trump is trying to use existing emergency authorities in an unprecedented way when he cannot get Congress or our allies and trading partners to do what he wants them to do. He has also been very clear that he sees the media as "the enemy of the people" and levies daily attacks on a variety of FCC-regulated media organizations and other media owners, threatening them with retaliation.

   Existing law gives the president the ability to declare an emergency and close down parts of the Internet and take over broadcast networks to transmit messages. We expect that this would only occur in the direst circumstances such as war or extreme natural disasters. But there is no guarantee that is the case with this—or any other President.

   Would the commission work with Congress and provide technical assistance to better reform our emergency laws regarding communications technology to ensure that emergency authority is not abused by any President for political or personal purposes?

RESPONSE: As with all proposed legislation implicating the Communications Act, the Commission can supply technical assistance should Congress wish to engage with respect to concrete legislative proposals.

5) Millions of Americans rely on their local public radio station for news, educational and cultural programming, emergency alerts and public safety information – including in

rural, remote and tribal areas. Many public radio stations are the only local news organizations in their communities, and provide unique programming and information tailored to their communities' needs and tastes. The public radio satellite system relies on C-Band spectrum to distribute national and regional programming to and among the local stations. In parts of New Mexico and other rural and tribal areas, there are few alternative sources of news, public safety information, and regional programming -- and no workable alternatives to satellite as a means to distribute public radio programming.

As the FCC considers plans to transition C-Band spectrum for 5G and commercial wireless services, please detail how the agency will ensure the C-Band spectrum and satellite service necessary for local public radio stations to continue to provide vital news, programming, and public safety services to America's rural and tribal communities.

RESPONSE: Rest assured that protecting vital incumbent services in the C-Band is a focus as the Commission moves forward to put this valuable spectrum resource to its highest and best use for all Americans. To that end, the Commission's Notice of Proposed Rulemaking sought extensive comment on how to protect incumbents in the band. The item asked numerous questions regarding how current end users will be protected, regardless of the transition approach ultimately adopted, including the provision of filters and technical assistance, relocation of earth stations, and adequate compensation for any costs incurred by incumbents. Further, the Commission recently collected additional information from earth stations that will provide a detailed picture of the number and location of earth stations in the band to ensure that licensed or registered earth stations are protected from harmful interference. The Commission will conduct a thorough review of this record and will aim to move forward in a way that protects these important interests, including the need for continued distribution of programming to American consumers in rural and Tribal communities.

6) I understand that some Connect America Fund deployments that have been delayed, potentially creating buildout compliance issues, due to bureaucratic issues. Have you heard of these types of issues? What steps can be taken to help streamline the process to enable providers to meet FCC deadlines and more importantly ensure that those living on tribal lands can more quickly experience the benefits of broadband?

RESPONSE: I understand that Commission staff has had conversations with Frontier Communications, a CAF Phase II recipient, about its ability to deploy broadband on Navajo Nation lands. Frontier informed Commission staff that the delays are due to gaining access to the necessary rights-of-way, which are matters controlled at the state, local, or Tribal level or through another federal agency that (of course) operates independent of the Commission's jurisdiction. Staff have encouraged the relevant parties to come to the table to efficiently find a resolution so that those living on Tribal lands may soon enjoy the benefits of broadband.

Questions for the Record from Senator Rosen

1) One area where telecommunications technology is making a real impact is with our most vulnerable populations, from our seniors to our disabled veterans to our hard of hearing and deaf population. As a member of the Special Committee on Aging I am especially concerned with the 38,000 deaf and hard of hearing people in my state of Nevada. With a growing aging population, not in just my state, but across the country, many will rely on IP Captioned Telephone Service to communicate. This service allows a person with hearing loss to talk normally into the phone, while reading captions of what the person on the other end of the line is saying in real time. My office has heard from consumers who are concerned that as these services move toward automated technologies, the replacement of humans with fully automated speech recognition may result in an inferior service.

    a. Chairman Pai, is the FCC currently testing the automated service in real-world conditions? Will you commit to additional study and testing to ensure accuracy of the service?

RESPONSE: I agree that IP CTS is a critical service for individuals with hearing loss. As you know, the vast majority of captioned telephone services already rely on automated speech recognition. However, those services previously have required the interposition of a communications assistant between the caller and the speech recognition software to "revoice" a caller's words. This interposition slows transcription, reduces the privacy of calls for callers, and increases the costs of IP CTS. That's why the Commission took steps to modernize IP CTS in June 2018 when we authorized the use of automated speech recognition without a communications assistant. We found that such automated speech recognition has become a viable alternative with its improvements in accuracy, speed, and privacy. Additionally, consumers will continue to be able to select a provider based on quality of service and available methods, as automated speech recognition will not be the sole means of offering IP CTS. Finally, I want to stress that nothing regarding our reforms allows substandard service: Providers using automated speech recognition must continue to meet the Commission's minimum standards and report data to the Commission to help us determine if further measures are necessary.

2) As we look to find new applications for emerging technologies, one promising area of development is in the growth of "smart" transportation systems, including vehicle-to-vehicle and vehicle-to-infrastructure communications such as Dedicated Short Range Communications or DSRC. As you may know, there are three operational DSRC connected vehicle projects underway in Nevada, including one in Washoe County and two in Las Vegas. These cities have already made significant investments in vehicle-to-vehicle communications.

    Chairman Pai, you recently announced that the FCC plans to take a "fresh look" at the 5.9-gigahertz spectrum that is reserved exclusively for automotive safety, with the potential to open up this band for unlicensed Wi-Fi use. Back in 2016, the FCC made a commitment to complete three phases of harmful interference testing to determine if sharing the band with unlicensed Wi-Fi is possible. It is my understanding that the FCC completed the first phase, which showed that Wi-Fi use in the band *did* indeed cause harmful interference to DSRC. Since then, there has not been any additional testing.

a. Can one of the panelists tell us where the FCC is on Phases II and III of the testing, why these phases have not yet been completed, and if the FCC plans to continue working with the Department of Transportation to complete the testing *prior* to making any changes to the 5.9-gigahertz band?

b. If interference is found in this band, what does the FCC propose to do to mitigate the impact on vehicle-to-vehicle communications?

RESPONSE: The Phase I tests performed at the FCC Laboratory showed that the Wi-Fi device features that are designed to avoid causing harmful interference to DSRC performed as claimed. The Department of Transportation is responsible for conducting Phases II and III of the testing.

In the meantime, automotive stakeholders have asked the Commission to allow deployment of C-V2X technology in this spectrum—a technology not authorized by the Commission's rules nor part of the agreed testing protocols. Given the lack of widespread deployment of the DSRC technology and the importance of maximizing the use of this prime spectrum, the Commission is considering taking a fresh look that would gather stakeholder input to ensure that we have the most up-to-date information.

Questions for the Record from Senator Markey

1) Automated speech recognition (ASR) has great promise for Internet Protocol Captioned Telephone Service (IP-CTS). However, I understand that current ASR engines vary in quality and accuracy, and I am concerned that nascent technologies might be certified for IP-CTS use without adequate testing. I believe that we need to be careful about implementing this service before it is fully ready.

   Chairman Pai, what testing is being done to ensure that ASR services can handle 911 and related public safety calls? Given that ASR engines vary in quality and accuracy, will you commit to ensure such testing will occur before certifying an ASR-only provider?

2) Do you agree that we need to ensure ASR-only providers can handle 911 and related public safety calls before such technology is FCC approved? In your view, has the FCC done enough adequate testing of all types of ASR engines?

RESPONSES: I agree that IP CTS is a critical service for individuals with hearing loss. As you know, the vast majority of captioned telephone services already rely on automated speech recognition. However, those services previously have required the interposition of a communications assistant between the caller and the speech recognition software to "revoice" a caller's words. This interposition slows transcription, reduces the privacy of calls for callers, and increases the costs of IP CTS. That's why the Commission took steps to modernize IP CTS in June 2018 when we authorized the use of automated speech recognition without a communications assistant. We found that such automated speech recognition has become a viable alternative with its improvements in accuracy, speed, and privacy. Additionally, consumers will continue to be able to select a provider based on quality of service and available methods, as automated speech recognition will not be the sole means of offering IP CTS. Finally, I want to stress that nothing regarding our reforms allows substandard service: Providers using automated speech recognition must continue to meet the Commission's minimum standards and report data to the Commission to help us determine if further measures are necessary. Importantly, all certified IP CTS providers (including those using ASR) must demonstrate that their services support 911 emergency calling and meet the applicable emergency call handling requirements.

3) The Public Radio Satellite System relies on C-Band frequencies to distribute news, programming, and public safety information to nearly 1,300 interconnected local public radio stations and millions of Americans across the country.

   Can you assure me that any plans to transition C-Band spectrum for new wirelesses services will not impair the vital role that public radio plays in our news, educational programming, and emergency services?

RESPONSE: Rest assured that protecting vital incumbent services in the C-Band is a focus as the Commission moves forward to put this valuable spectrum resource to its highest and best use for all Americans. To that end, the Commission's Notice of Proposed Rulemaking sought extensive comment on how to protect incumbents in the band. The item asked numerous questions regarding how current end users will be protected, regardless of the transition approach ultimately adopted, including the provision of filters and technical assistance, relocation of earth stations, and adequate compensation for any costs incurred by incumbents. Further, the Commission recently collected additional information from earth stations that will provide a

detailed picture of the number and location of earth stations in the band to ensure that licensed or registered earth stations are protected from harmful interference. The Commission will conduct a thorough review of this record and will aim to move forward in a way that protects these important interests, including the need for continued distribution of programming to American consumers.

4) The Commission recently issued a Notice of Proposed Rulemaking to allow unlicensed, indoor "Wi-Fi" use of the 6GHz band. Yet we also know that energy-efficiency building codes established by the Department of Energy directly impact wireless penetration of a building's outer envelope.

   Chairman Pai, has the Commission consulted with the Department of Energy (DOE) on this rulemaking? Has the Commission and DOE considered establishing a working group between the two agencies to address how these two goals – improving connectivity and energy-efficiency in buildings – intersect with one another?

RESPONSE: While we have not spoken directly with DoE representatives on this matter, the Leading Builders of America are an active participant in this proceeding, having submitted comments and held several meetings with Commission staff. The Leading Builders have provided information regarding new building energy efficiency and its effect on RF signals. To the extent that we need additional information, we won't hesitate to contact the experts at DoE.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992	)	MB Docket No. 05-311

THIRD REPORT AND ORDER

Adopted: August 1, 2019 **Released: August 2, 2019**

By the Commission: Chairman Pai and Commissioners O'Rielly and Carr issuing separate statements; Commissioners Rosenworcel and Starks dissenting and issuing separate statements.

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I. INTRODUCTION

1. In this *Third Report and Order* (*Third Order*), we interpret sections of the Communications Act of 1934, as amended (the Act) that govern how local franchising authorities (LFAs) may regulate cable operators and cable television services, with specific focus on issues remanded from the United States Court of Appeals for the Sixth Circuit (Sixth Circuit) in *Montgomery County, Md. et al.*

v. FCC.[1] First, we conclude that cable-related, "in-kind" contributions required by a cable franchise agreement are franchise fees subject to the statutory five percent cap on franchise fees set forth in section 622 of the Act, with limited exceptions, including an exemption for certain capital costs related to public, educational, and governmental access (PEG) channels.[2] Second, we find that under the Act, LFAs may not regulate the provision of most non-cable services,[3] including broadband Internet access service, offered over a cable system by an incumbent cable operator. Third, we find that the Act preempts any state or local regulation of a cable operator's non-cable services that would impose obligations on franchised cable operators beyond what Title VI of the Act allows. Finally, we conclude that Commission requirements that concern LFA regulation of cable operators should apply to state-level franchising actions and state regulations that impose requirements on local franchising.

II. BACKGROUND

2. Every LFA as well as every "cable operator"[4] that offers "cable service"[5] must comply with the cable franchising provisions of Title VI of the Act.[6] Section 621(b)(1) prohibits a cable operator from providing cable service without first obtaining a cable franchise,[7] while section 621(a)(1) circumscribes the power of LFAs to award or deny such franchises.[8] In addition, section 622 allows LFAs to charge franchise fees and sets the upper boundaries of those fees. Notably, section 622 caps the fee at five percent of a "cable operator's gross revenues derived . . . from the operation of the cable system to provide cable service."[9] When Congress initially adopted these sections in 1984, it explained that it was setting forth a federal policy to "define and limit the authority that a franchising authority may exercise through the franchise process."[10] Congress also expressly preempted any state or local laws or actions that conflict with those definitions and limits.[11]

3. As summarized in detail in the *Second FNPRM*, the Commission has an extensive history of rulemakings and litigation interpreting sections 621 and 622.[12] In short, the Commission in 2007 released a *First Report and Order* to provide guidance about terms and conditions in local franchise

[1] *Montgomery County, Md. et al. v. FCC*, 863 F.3d 485 (6th Cir. 2017) (*Montgomery County*).

[2] 47 U.S.C. § 542.

[3] *See infra* note 257 (defining "non-cable service").

[4] *Id*. § 502(5) ("the term 'cable operator' means any person or group of persons (A) who provides cable service over a cable system and directly or through one or more affiliates owns a significant interest in such cable system, or (B) who otherwise controls or is responsible for, through any arrangement, the management and operation of such a cable system.").

[5] *Id*. § 502(6) ("the term 'cable service' means— (A) the one-way transmission to subscribers of (i) video programming, or (ii) other programming service, and (B) subscriber interaction, if any, which is required for the selection or use of such video programming or other programming service.").

[6] *Id*. §§ 521-573.

[7] *Id*. § 541(b)(1).

[8] *Id*. § 541(a)(1).

[9] *Id*. § 542.

[10] H.R. Rep. No. 98-934, at 19 (1984).

[11] 47 U.S.C. § 556(c). *See, e.g.*, *Comcast v. City of Plano*, 315 S.W.3d 673, 678-80 (Tex. Ct. App. 2010) (discussing historical development of federal regulatory scheme); *City of Chicago v. Comcast Cable Holdings, L.L.C.*, 231 Ill.2d 399, 405-07 (2008).

[12] *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992*, Second Further Notice of Proposed Rulemaking, 33 FCC Rcd 8952, 8953-59, paras. 3-14 (2018) (*Second FNPRM*).

agreements that are unreasonable under section 621 of the Act with respect to new entrants' franchise agreements.[13] Two major conclusions that the Commission adopted are that (1) non-cash, "in-kind" contributions from cable operators to franchise authorities are franchise fees that count toward the statutory cap of five percent of cable operator revenue,[14] and (2) franchising authorities may not use their cable franchising authority to regulate non-cable services (like telephone and broadband services) that the new entrants deliver over their mixed-use networks (*i.e.*, networks that carry broadband services, voice services, and other non-cable services, in addition to video programming services).[15] The Commission also sought comment on whether to extend those conclusions to agreements that LFAs have with incumbent cable operators,[16] and ultimately decided in a *Second Report and Order*[17] and an *Order on Reconsideration*[18] that those conclusions should apply to incumbent cable operators.

4. In *Montgomery County*, the Sixth Circuit addressed challenges by LFAs to the *Second Report and Order* and the *Order on Reconsideration*.[19] The court agreed that in-kind (*i.e.*, non-cash) contributions are franchise fees as defined by section 622(g)(1), noting that section 622(g)(1) defines "franchise fee" to include "*any* tax, fee, or assessment *of any kind*" and that the terms "tax" and "assessment" can include nonmonetary exactions.[20] The court found, however, that the fact that the term franchise fee *can* include in-kind contributions "does not mean that it necessarily does include every one of them."[21] The court concluded that the Commission failed to offer any explanation in the *Second Report and Order* or in the *Order on Reconsideration* as to why section 622(g)(1) allows it to treat cable-related, "in-kind" exactions—such as free or discounted cable services or obligations related to PEG channels—as franchise fees.[22] LFAs had claimed that the Commission's interpretation would limit LFAs' ability to enforce their statutory authority to require cable operators to dedicate channel capacity for PEG use and to impose build-out obligations in low-income areas,[23] and the court noted that the Commission's orders did not reflect any consideration of this concern.[24] The court also stated that the Commission failed to define what "in-kind" means.[25] The court therefore vacated as arbitrary and capricious the *Second Report and Order* and the *Order on Reconsideration* to the extent that they treat cable-related, in-

[13] *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992*, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 5101 (2007) *(First Report and Order*), *aff'd sub nom*. *Alliance for Community Media et al. v. FCC*, 529 F.3d 763 (6th Cir. 2008) (*Alliance*), *cert. denied*, 557 U.S. 904 (2009). The term "new entrants" as used in the *First Report and Order* refers to entities that choose to offer "cable service" over a "cable system" utilizing public rights-of-way and thus are deemed under the Act to be "cable operator[s]" that must obtain a franchise. *First Report and Order*, 22 FCC Rcd at 5106 n.24. Such new entrants largely were telecommunications carriers subject to Title II of the Act that were seeking to enter the cable services market.

[14] *First Report and Order*, 22 FCC Rcd at 5149-50, paras. 105-08.

[15] *Id*. at 5155-56, paras. 121-24.

[16] *Id*. at 5164-65, paras. 139-40.

[17] *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992*, Second Report and Order, 22 FCC Rcd 19633, 19637-38, 19640-41, paras. 11, 17 (2007) (*Second Report and Order*).

[18] *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992*, Order on Reconsideration, 30 FCC Rcd 810, 814-17, paras. 11-15 (2015) (*Order on Reconsideration*).

[19] *Montgomery County*, 863 F.3d at 487.

[20] *Id*. at 490-91.

[21] *Id*. at 491.

[22] *Id*. In the *First Report and Order*, the Commission ruled that "any requests made by LFAs that are unrelated to the provision of cable services by a new competitive entrant are subject to the statutory 5 percent franchise fee cap." (continued….)

kind exactions as franchise fees under section 622(g)(1).[26] The court directed the Commission to determine and explain on remand to what extent cable-related, in-kind contributions are franchise fees under the Act.[27]

5. The court in *Montgomery County* also agreed with LFAs that neither the *Second Report and Order* nor the *Order on Reconsideration* offered a valid statutory basis for the Commission's application of its prior "mixed-use ruling" to incumbent cable operators.[28] Under the mixed-use rule, "LFAs' jurisdiction applies only to the provision of cable services over cable systems" and "an LFA may not use its video franchising authority to attempt to regulate a LEC's entire network beyond the provision of cable services."[29] The court stated that the Commission's decision in the *First Report and Order* to apply the mixed-use rule to new entrants had been defensible because section 602(7)(C) of the Act expressly states that LFAs may regulate Title II carriers only to the extent that they provide cable services and the Commission found that new entrants generally are Title II carriers.[30] The court observed that in extending the mixed-use rule to incumbent cable operators in the *Second Report and Order*, the Commission merely relied on the *First Report and Order*'s interpretation of section 602(7)(C), noting that section 602(7)(C) "does not distinguish between incumbent providers and new entrants."[31] The court found, however, that this reasoning is not an affirmative basis for the Commission's decision in the *Second Report and Order* to apply the mixed-use rule to incumbent cable operators because section 602(7)(C) by its terms applies only to Title II carriers and "many incumbent cable operators are not Title II carriers."[32] The court further found that the *Order on Reconsideration* did not offer any statutory basis for the Commission's decision to extend the mixed-use rule to incumbent cable operators.[33] Accordingly, the court concluded that the Commission's extension of the mixed-use rule to incumbent cable operators that are not common carriers was arbitrary and capricious.[34] The court vacated the mixed-use rule as applied to those incumbent cable operators and remanded for the Commission "to set forth a valid

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First Report and Order, 22 FCC Rcd at 5149, para. 105. This ruling was upheld by the Sixth Circuit in *Alliance*. 529 F.3d at 782-83. The Commission later relied on the *First Report and Order* to conclude that "in-kind payments involving both cable and non-cable services" count toward the franchise fee cap. *Order on Reconsideration*, 30 FCC Rcd at 816, para. 13. The court found that the *Order on Reconsideration* incorrectly asserted that the *First Report and Order* had already treated "in-kind" cable-related exactions as franchise fees and that the Sixth Circuit had approved such treatment in *Alliance*. *Montgomery County*, 863 F.3d at 490. The court also found that the *First Report and Order* did not make clear that cable-related exactions are franchise fees under section 622(g)(1). *Id*. In this regard, the court pointed out that the Commission specifically told the Sixth Circuit in *Alliance* that the *First Report and Order*'s "analysis of in-kind payments was expressly limited to payments that do not involve the provision of cable service." *Id*.

[23] 47 U.S.C. § 531.

[24] *Montgomery County*, 863 F.3d at 491.

[25] *Id*.

[26] *Id*. at 491-92.

[27] *Id*. at 492.

[28] *Id*. at 493. The court noted that LFAs' primary concern with the mixed-use ruling is that it would prevent them from regulating "institutional networks" or "I-Nets"—communication networks that are constructed or operated by the cable operator and are generally available only to subscribers who are not residential customers—even though the Act makes clear that LFAs may regulate I-Nets. *Id*. at 492; *see* 47 U.S.C. §§ 531(b) (authorizing franchising authorities to require as part of a franchise or franchise renewal that channel capacity on institutional networks be designated for educational or governmental use), 541(b)(3)(D) ("Except as otherwise permitted by sections 611 and (continued….)

statutory basis, if there is one, for the rule as so applied."[35]

6. The Commission in September 2018 issued the *Second FNPRM* to address the issues raised by the remand from the Sixth Circuit in *Montgomery County*. In the *Second FNPRM*, the Commission tentatively concluded that: (1) it should treat cable-related, in-kind contributions required by LFAs from cable operators as a condition or requirement of a franchise agreement as franchise fees subject to the statutory five percent cap on franchise fees set forth in section 622 of the Act, with certain exceptions;[36] and (2) it should apply its mixed-use rule to incumbent cable operators.[37] The Commission sought comment on these tentative conclusions.[38] The Commission also sought comment on whether other statutory provisions limit LFAs' authority to regulate non-cable services offered over a cable system by an incumbent cable operator or the facilities and equipment used to provide such services.[39] Finally, the Commission invited comment on whether it should apply its proposals and tentative conclusions in the *Second FNPRM*, and its prior decisions governing regulation of cable operators by local franchising authorities, to franchising actions taken at the state level and state regulations that impose requirements on local franchising.[40]

III. DISCUSSION

7. We largely adopt our tentative conclusions in the *Second FNPRM*.[41] First, we conclude that cable-related, in-kind contributions required by LFAs from cable operators as a condition or requirement of a franchise agreement are franchise fees subject to the statutory five percent cap on

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612, a franchising authority may not require a cable operator to provide any telecommunications service or facilities, other than institutional networks, as a condition of the initial grant of a franchise, a franchise renewal, or a transfer of a franchise"). *See also id*. § 531(f) (defining "institutional networks"). The court observed, however, that the Commission acknowledged that its mixed-use rule was not meant to prevent LFAs from regulating I-Nets. *Montgomery County*, 863 F.3d at 492.

[29] *First Report and Order*, 22 FCC Rcd at 5155, paras. 121-22.

[30] *Montgomery County*, 863 F.3d at 492-93.

[31] *Id*. at 493.

[32] *Id*.

[33] *Id*.

[34] *Id*.

[35] *Id*.

[36] *Second FNPRM*, 33 FCC Rcd at 8960-64, paras. 16-24. The Commission proposed to apply this treatment of cable-related, in-kind contributions to both incumbent cable operators and new entrants. *Id*. at 8963-64, para. 22.

[37] *Second FNPRM*, 33 FCC Rcd at 8964-65, para. 25. In particular, the Commission tentatively concluded that the mixed-use rule prohibits LFAs from regulating the provision of any services other than cable services offered over the cable systems of incumbent cable operators that are common carriers, or from regulating facilities and equipment used in the provision of such non-cable services, with the exception of I-Nets. *Id*. at 8965-66, para. 26. Similarly, the Commission tentatively concluded that LFAs are prohibited from regulating the provision of non-cable services provided by incumbent cable operators that are not common carriers, or the facilities and equipment used to provide such services. *Id*. at 8966-68, paras. 27-28.

[38] *Id*. at 8952, para. 1.

[39] *Id*. at 8969-71, para. 31.

[40] *Id*. at 8971-72, para. 32.

[41] As discussed below, we define "cable related, in-kind contributions" slightly differently than proposed, and our reasoning for not applying build-out costs is different than what we proposed. *Compare infra* paras. 25 and 57 *with Second FNPRM*, 33 FCC Rcd at 8963-64, paras. 21 and 24.

franchise fees set forth in section 622 of the Act. We find that the Act exempts capital contributions associated with the acquisition or improvement of a PEG facility from this definition and remind LFAs that under the Act they may only require "adequate" PEG access channel capacity, facilities, or financial support. Second, we find that our mixed-use rule applies to incumbent cable operators. Third, we find that the Act preempts any state or local regulation of a cable operator's non-cable services that would impose obligations on franchised cable operators beyond what Title VI of the Act allows. Finally, we decide that our guidance related to the local franchising process in this docket also will apply to state-level franchising actions and state regulations that impose requirements on local franchising.

A. In-Kind Contributions

8. Section 622 of the Act contains a broad definition of franchise fees. For the reasons provided below, we find that most cable-related, in-kind contributions are encompassed within this definition and thus must be included for purposes of calculating the statutory five percent cap on such fees. In this section, we first explain our interpretation of section 622 and why the definition of franchise fees includes most cable-related, in-kind contributions. We then explain how our interpretation applies to certain common franchise agreement terms. Lastly, we explain the process that LFAs and cable operators should use to amend their franchise agreements to conform to this Order.

1. Interpretation of Cable-Related, In-Kind Contributions Under Section 622

9. Addressing the first issue raised by the remand from the Sixth Circuit in *Montgomery County*, we adopt our tentative conclusion that we should treat cable-related, in-kind contributions[42] required by LFAs from cable operators as a condition or requirement of a franchise agreement as franchise fees subject to the statutory five percent cap set forth in section 622 of the Act, with limited exceptions as described herein.[43] We also adopt our tentative conclusion that this treatment of cable-related, in-kind contributions should be applied to both new entrants and incumbent cable operators.[44] As explained below, we find that this interpretation is consistent with the statutory language and legislative history.

10. Section 622 of Title VI, entitled "Franchise fees," governs cable operator obligations with respect to franchise fees.[45] Specifically, section 622(a) states that any cable operator may be required under the terms of any franchise agreement to pay a franchise fee, and section 622(b) sets forth the limitation that "[f]or any twelve-month period, the franchise fees paid by a cable operator with respect to any cable system shall not exceed 5 percent of such cable operator's gross revenues derived in such period from the operation of the cable system to provide cable services."[46] Notably, section 622(g) defines the term "franchise fee" for purposes of this section.[47]

11. To understand what types of contributions from cable operators are franchise fees subject to the five percent statutory cap, the key provision is the section 622(g) definition, which states that "the term 'franchise fee' includes *any tax, fee, or assessment of any kind* imposed by a franchising authority or other governmental entity on a cable operator or cable subscriber, or both, solely because of their status as

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[42] We define this term *infra* para. 25, to include "any non-monetary contributions related to the provision of cable services provided by cable operators as a condition or requirement of a local franchise, including but not limited to free or discounted cable service to public buildings, non-capital costs in support of PEG access, and costs attributable to the construction of I-Nets. It does not include the costs of complying with build-out and customer service requirements."

[43] *Second FNPRM*, 33 FCC Rcd at 8960, para. 16.

[44] *Id*. at 8963, para. 22.

[45] 47 U.S.C. § 542.

[46] *Id*. § 542(a), (b).

[47] *Id*. § 542(g).

such," subject to certain enumerated exceptions.[48] Specifically, according to the definition, the term "franchise fee" does not include the following: (1) any tax, fee, or assessment of general applicability;[49] (2) in the case of any franchise in effect on October 30, 1984, payments which are required by the franchise to be made by the cable operator during the term of such franchise for, or in support of the use of, PEG access facilities;[50] (3) in the case of any franchise granted after October 30, 1984, capital costs which are required by the franchise to be incurred by the cable operator for PEG access facilities;[51] (4) requirements or charges incidental to the awarding or enforcing of the franchise, including payments for bonds, security funds, letters of credit, insurance, indemnification, penalties, or liquidated damages;[52] or (5) any fee imposed under Title 17.[53] Because Congress spoke directly to the issue of what constitutes a franchise fee in section 622(g), our analysis of whether cable-related, in-kind exactions are included in the franchise fee is appropriately focused on this statutory language.

12. As a preliminary matter, we note our prior finding, which was upheld by the Sixth Circuit in *Montgomery County*, that the franchise fee definition in section 622(g) can encompass both monetary payments imposed by a franchising authority or other governmental entity on a cable operator, as well as "in-kind" payments – *i.e.*, payments consisting of something other than money, such as goods and services[54] – that are so imposed.[55] The definition of "franchise fee" in section 622(g)(1) broadly covers "any tax, fee, or assessment of any kind imposed by a franchising authority or other governmental entity on a cable operator . . . solely because of [its] status as such."[56] Because the statute does not define the terms "tax," "fee," or "assessment," we look to the ordinary meaning of such terms.[57] As the court explained in *Montgomery County*, the definitions of the terms "tax" and "assessment," in particular, "can include noncash exactions."[58] Further, as the court observed, section 622(g)(1) "more specifically defines 'franchise fee' to include '*any* tax, fee, or assessment *of any kind*[,]' . . . which requires us to give those terms maximum breadth."[59] Thus, consistent with the court's conclusion on this issue, the term franchise fee in section 622(g)(1) includes non-monetary payments.[60] We, therefore, reject arguments that it should

[48] *Id*. § 542(g)(1) (emphasis added).

[49] *Id*. § 542(g)(2)(A). In the *Second FNPRM*, we noted that, by definition, a tax, fee, or assessment of general applicability does not cover cable-related, in-kind contributions, and therefore we tentatively concluded that this exclusion is not applicable to such contributions. *Second FNPRM*, 33 FCC Rcd at 8961, para. 18. *See also* H.R. Rep. No. 934, 98th Cong., 2nd Sess. 1984 at 64 ("This would include such payments as a general sales tax, an entertainment tax imposed on other entertainment businesses as well as the cable operator, and utility taxes or utility user taxes which, while they may differentiate the rates charged to different types of utilities, do not unduly discriminate against the cable operator so as to effectively constitute a tax directed at the cable system."). No commenter disputes this analysis, and we affirm it here.

[50] 47 U.S.C. § 542(g)(2)(B). *See infra* Section III.A.2.b (discussing PEG costs).

[51] *Id*. § 542(g)(2)(C). *See infra* Section III.A.2.b (discussing PEG costs).

[52] *Id*. § 542(g)(2)(D). In the *First Report and Order*, the Commission found that the term "incidental" in this section should be limited to the list of incidentals in the statutory provision, as well as certain other minor expenses, and the court in *Alliance* upheld this determination. *First Report and Order*, 22 FCC Rcd at 5148, para. 103; *Alliance*, 539 F.3d at 782-83. The Commission also emphasized that non-incidental costs should be counted toward the five percent cap on franchise fees, and listed various examples including attorney fees and consultant fees, application or processing fees that exceed the reasonable cost of processing the application, acceptance fees, free or discounted services provided to an LFA, and in-kind services unrelated to the provision of cable services. *First Report and Order*, 22 FCC Rcd at 5149, para. 104. In the *Second FNPRM*, we explained that, although the statute does not define the term "incidental," based on the interpretive canon of *noscitur a sociis*, the exemplary list delineated in the text of the provision as well as the applicable legislative history suggests that the term refers to costs or requirements related to assuring that a cable operator is financially and legally qualified to operate a cable system, not to cable-related, in-kind contributions. *Second FNPRM*, 33 FCC Rcd at 8961-62, para. 18 (citing *Gustafson v. Alloyd Co.*, 513 U.S. 561, 575 (1995)). *See also* H.R. Rep. No. 934, 98th Cong., 2nd Sess. 1984 at 64 ("[F]ranchise fee is defined (continued….)

be construed to cover only monetary payments.[61]

13. As the court noted in *Montgomery County*, "that the term 'franchise fee' can include noncash exactions, of course, does not mean that it necessarily *does* include every one of them."[62] As such, the next step in our analysis is to evaluate specifically whether *cable-related*, in-kind contributions[63] are included within the franchise fees. The Commission previously determined that in-kind contributions unrelated to the provision of cable service are franchise fees subject to the statutory five percent cap, and the court's decision in *Montgomery County* upheld this interpretation.[64] In making this determination, the Commission pointed to examples in the record where LFAs demanded in-kind contributions unrelated to the provision of cable services in the context of franchise negotiations, and it explained that such requests do not fall within any of the exempted categories in section 622(g)(2) and thus should be considered a franchise fee under section 622(g)(1).[65]

14. We find that there is no basis in the statute for exempting all cable-related, in-kind contributions for purposes of the five percent franchise fee cap or for distinguishing between cable-related, in-kind contributions and in-kind contributions unrelated to the provision of cable services. As noted above, the section 622(g)(1) franchise fee definition broadly covers "any tax, fee, or assessment of any kind,"[66] and we conclude that cable-related, in-kind contributions fall within this definition. There is nothing in this language that limits in-kind contributions included in the franchise fee.[67] In fact, Congress specified that the definition covers "*any*" tax, fee, or assessment "*of any kind*," which means those terms should be interpreted expansively and given "maximum breadth."[68]

15. Further, there is no general exemption for cable-related, in-kind contributions in the five excluded categories listed in section 622(g)(2).[69] Only two of the exclusions encompass two very specific kinds of cable-related, in-kind contributions, but not all such contributions generally. In particular, section 622(g)(2)(B) excludes payments required by the franchise to be made by the cable operator for, or in support of the use of, PEG access facilities (for franchises in effect on October 30, 1984), and section

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so as not to include any bonds, security funds, or other incidental requirements or costs necessary to the enforcement of the franchise."). Consistent with this analysis and precedent, we find that cable-related, in-kind contributions demanded by an LFA do not qualify as "incidental" charges excluded in section 622(g)(2)(D). *See id*. No commenter disputes our interpretation of this particular exclusion.

[53] 47 U.S.C. § 542(g)(2)(E). In the *Second FNPRM*, we explained that this section excludes from the definition of franchise fees any fees imposed under the Copyright Act under Title 17, United States Code, and thus does not appear to apply to cable-related, in-kind contributions. *Second FNPRM*, 33 FCC Rcd at 8961, para. 18. *See also* H.R. Rep. No. 934, 98th Cong., 2nd Sess. 1984 at 64 ("Any fee imposed under the Copyright Act would not be considered a franchise fee."). No commenter disputes this analysis, and we affirm it here.

[54] *See* Merriam-Webster, Definition of "In-Kind," *available at* https://www.merriam-webster.com/dictionary/in-kind (defining "in-kind" as "consisting of something (such as goods or commodities) other than money"). According to the record, LFAs in some cases require a grant or other monetary contribution earmarked for cable-related services, such as PEG and I-Net support. *See, e.g.*, Altice May 9, 2019 *Ex Parte* at 7-8 (describing Altice's payment of "PEG grants" to LFAs). While we focus here on whether cable-related, *in-kind* (non-monetary) contributions are subject to the five percent cap on franchise fees, we note that these monetary contributions are subject to the franchise fee cap, unless otherwise excluded under section 622(g)(2). *See infra* note 61.

[55] *See First Report and Order*, 22 FCC Rcd at 5149, paras. 104-05; *Second FNPRM*, 33 FCC Rcd at 8960, para. 17. We reject the argument that franchise considerations are not "imposed" by a franchising authority because they are negotiated in an arms-length transaction between the parties and "are not established by force." *See* Comments of the Association of Washington Cities *et al*., at 10 (Nov. 14, 2018) (AWC *et al*. Comments); Comments of the City of Philadelphia, *et al.*, at 21-23 (Nov. 14, 2018) (City of Philadelphia *et al*. Comments); Reply Comments of the City of Philadelphia, *et al*., at 6-7 (Dec. 14, 2018) (City of Philadelphia *et al*. Reply); NATOA *et al*. July 24, 2019 *Ex Parte* at 2. The definition of the term "impose" is not limited to "established as if by force," but can also mean "to establish or apply by authority." *See* Merriam-Webster, Definition of "Impose," *available at* https://www.merriam-webster.com/dictionary/impose. *See also* Reply Comments of Free State Foundation, at 11-12 (Dec. 14, 2018) (Free State Foundation Reply) ("Nor should the Commission accept the contention that in-kind
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622(g)(2)(C) excludes capital costs which are required by the franchise to be incurred by the cable operator for PEG access facilities (for franchises granted after October 30, 1984).[70] We agree with ACA that the structure of the relevant statutory provision is "straightforward," providing a broad definition of franchise fee, "then expressly provid[ing] a limited number of exceptions to this definition, none of which is so broad as to include all cable-related, in-kind contributions."[71]

16. Moreover, the fact that Congress carved out specific exceptions to the franchise fee definition for certain PEG-related contributions bolsters the conclusion that Congress did not intend to establish a general exemption for all cable-related, in-kind contributions from treatment as franchise fees.[72] Because support for PEG access facilities and PEG capital costs fall within the broader category of cable-related, in-kind contributions, Congress would not have needed to craft these narrow exceptions if all cable-related, in-kind contributions generally were exempted.[73] We disagree with the contention that the specific exceptions in section 622(g)(2) were intended to address only "payments that otherwise might be considered franchise fees," and that "[o]ther cable-related obligations were not considered 'fees' to begin with, let alone payments that required a specific exemption."[74] This argument erroneously constricts the definition of franchise fees to apply only to "fees," while the statute more broadly includes "any tax, fee, or assessment of any kind." Further, we believe it is more consistent with the statutory text and structure to construe the exceptions as carve-outs from a broader definition that sweeps in all cable-related, in-kind contributions.[75]

17. While the statutory text is alone sufficient to support our conclusion, we also find that the legislative history supports our position that cable-related, in-kind contributions are franchise fees subject to the five percent cap.[76] As we observed in the *Second FNPRM*, we see no basis in the legislative history for distinguishing between in-kind contributions unrelated to the provision of cable services and cable-related, in-kind contributions for purposes of the five percent franchise fee cap.[77] Further, we see no basis

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contributions are purely voluntary and therefore ought not be restricted by the Commission's proposal. Sections 621 and 622 reflect the understanding that LFAs are not ordinary private market participants but governing authorities with significant power and policy setting concerns."). Further, under this narrow interpretation of the term, no monetary or in-kind payments could be construed as a franchise fee if they are negotiated by the parties as terms of the franchise agreement. As NCTA points out, "[b]y this standard, even a franchise agreement containing a requirement that the cable operator pay five percent of gross revenues to the franchising authority would not contain a franchise fee, since the five percent fee was included in a negotiated document and was not imposed by government fiat." Reply Comments of NCTA – The Internet & Television Association, at 5, n.13 (Dec. 14, 2018) (NCTA Reply).

[56] 47 U.S.C. § 542(g)(1) (emphasis added).

[57] *Taniguchi v. Kan Pac. Saipan, Ltd.*, 566 U.S. 560, 566, 132 S. Ct. 1997, 2002, 182 L. Ed. 2d 903 (2012) ("When a term goes undefined in a statute, we give the term its ordinary meaning."). *See* Merriam-Webster, Definition of "Tax," *available at* https://www.merriam-webster.com/dictionary/tax (defining "tax" as "a charge usually of money imposed by authority on persons or property for public purposes; a sum levied on members of an organization to defray expenses"); Black's Law Dictionary (7th ed. 1999), Definition of "Tax," (noting that "[m]ost broadly, the term embraces all governmental impositions on the person, property, privileges, occupations, and enjoyment of the people. . . . Although a tax is often thought of as being pecuniary in nature, *it is not necessarily payable in money*" (emphasis added)); Merriam-Webster, Definition of "Fee," *available at* https://www.merriam-webster.com/dictionary/fee (defining "fee" as "a fixed charge; a sum paid or charged for a service"); Black's Law Dictionary (7th ed. 1999), Definition of "Fee," (defining "fee" as "[a] charge for labor or services"); Merriam-Webster, Definition of "Assessment," *available at* https://www.merriam-webster.com/dictionary/assessment (defining "assessment" as "the amount assessed: an amount that a person is officially required to pay especially as a (continued….)

in the legislative history to treat in-kind payments differently from monetary payments for purposes of determining what is a franchise fee. The legislative history, in discussing what constitutes a franchise fee, refers to the definition in section 622(g)(1), which "include[s] any tax, fee, or assessment imposed on a cable operator or subscribers solely because of their status as such," and it makes no distinction between cable-related contributions and those unrelated to cable services, nor between monetary and non-monetary payments.[78] The legislative history then elaborates on the specific exemptions in Section 622(g)(2) and, in particular, notes that "[s]pecific exemptions from the franchise fee limitations are included for certain payments related to public, educational and governmental access."[79] It specifies that, "[f]or existing franchises, a city may enforce requirements that additional payments be made above the 5 percent cap to defray the cost of providing public, educational and governmental access, including requirements related to channels, facilities and support necessary for PEG use."[80] Because Congress limited this exception to then-existing franchises, this provision elucidates Congress' intent that contributions in support of PEG access – which are cable-related, in-kind contributions – are subject to the five percent cap for franchises granted after the 1984 Cable Act.[81]

18. We disagree with commenters who cite to a portion of the legislative history as evidence of Congress' intent that franchise fees include only monetary payments made by cable operators. Specifically, LFA commenters cite a statement in the discussion of subsection 622(g)(2)(C), which excludes certain PEG-related capital costs from the franchise fee definition, that "[i]n general, this section defines as a franchise fee only monetary payments made by the cable operator, and does not include as a 'fee' any franchise requirements for the provision of services, facilities or equipment."[82] LFA commenters' reading of this statement is inconsistent with the overall text and structure of section 622(g).[83] Section 622(g)(1) "specifically defines 'franchise fee' to include '*any* tax, fee, or assessment *of any kind*[,]'" subject to certain enumerated exclusions, and the court in *Montgomery County* was clear that this statutory language "requires us to give those terms maximum breadth."[84] The Commission has

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tax"); Black's Law Dictionary (7th ed. 1999), Definition of "Assessment," (defining "assessment" as the "[i]mposition of something, such as a tax or fine, according to an established rate"). *See also Montgomery County*, 863 F.3d at 490 (noting that the term "assessment" has been defined as "[a]n enforced contribution of money *or other property* . . . [or] *any contribution* imposed by government upon individual, for the use and service of the state," and observing that Justice Scalia has recognized that assessments need not be monetary by referring to "in-kind assessments") (emphasis in original) (citations omitted). We disagree with NATOA *et al*.'s contention that the Commission "nowhere analyzes or explains why [certain] franchise requirements are 'assessments' or 'exactions.'" *See* NATOA *et al*. July 24, 2019 *Ex Parte* at 2. *See also* Anne Arundel County *et al*. July 24, 2019 *Ex Parte* at 8 (arguing that the Commission does not "offer[] a basis in established law for the idea that any imposition of costs is presumptively a tax, fee, or assessment"). Rather, we find that an "assessment," the term used in the statute, includes any contribution imposed by government, based on its ordinary meaning.

[58] *See Montgomery County*, 863 F.3d at 490-91.

[59] *Id*.

[60] *Id*. *See also* NCTA Reply at 4-5; Comments of Verizon, at 5 (Nov. 14, 2018) (Verizon Comments); Reply Comments of Altice USA, Inc., at 19 (Dec. 14, 2018) (Altice Reply); ICLE July 18, 2019 *Ex Parte* at 3-13.

[61] *See* City of Philadelphia *et al*. Comments at 22 (arguing that "[b]ased on the ordinary meanings of the terms, there is nothing unclear about what is included as a franchise fee" and that all of the terms used in the definition "are referring to unilateral monetary charges by a unit of government"); Comments of Charles County, Maryland, at 7 (Nov. 14, 2018) (Charles County Comments) (arguing that "the words tax, fee, and assessment are terms of art and have precise meaning established by lengthy precedent" and that "Congress chose not to draft the statutory language to include other forms of value transfer, such as grants, external costs, or charges, in the statutory definition of franchise fees"); Reply Comments of Anne Arundel County, Maryland *et al*., at 6 (Dec. 14, 2018) (Anne Arundel (continued….)

already concluded, and the Sixth Circuit has twice upheld, that non-monetary payments can be franchise fees. Further, this reading would render section 622(g)(2)(C) superfluous because there would not need to be an exemption for PEG-related in-kind contributions if non-monetary contributions were not franchise fees in the first place.[85]

19. Because we believe that the pertinent statutory provision in section 622(g) supports our conclusion that cable-related, in-kind contributions are franchise fees, we reject arguments raised by franchise authorities that other Title VI provisions should be read to exclude costs that are clearly included by the franchise fee definition. Instead of focusing on the key definition of "franchise fee" as "any tax, fee, or assessment of any kind" subject to certain enumerated exceptions, LFA commenters cite to other parts of the statute which, they argue, evince Congress' intent to exclude cable-related, in-kind contributions from the statutory cap on franchise fees.[86] We reject each of these arguments in turn below.

20. First, we affirm our tentative conclusion that treating cable-related, in-kind contributions as franchise fees would not undermine the provisions in the Act that authorize or require LFAs to impose cable-related obligations on franchisees.[87] For example, section 611(b) of the Act permits LFAs to require that channel capacity be designated for PEG use and that channel capacity on I-Nets be designated for educational and governmental use.[88] Anne Arundel County *et al*. argue that the Commission errs by not acknowledging that the Cable Act "authorize[s] LFAs to both impose cable franchise obligations [in section 611] *and* collect franchise fees [in section 622]—they do not offset each other."[89] However, as we observed in the *Second FNPRM*, the fact that the Act authorizes LFAs to impose such obligations does not mean that the value of these obligations should be excluded from the five percent cap on franchise fees.[90] We agree with NCTA and ACA that there is no basis in the statutory text for concluding that the authority provided in section 611(b) affects the definition of franchise fee in section 622(g).[91] As explained above, section 622(g) is the key provision that defines what is included in the franchise fee, and section 622(g)(2) carves out only limited exclusions for PEG-related costs and makes no mention of an I-

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County *et al*. Reply) ("The Act is clearly structured to consider as franchise fees only *monetary payments*, and to treat other, cable-related non-monetary services and facilities requirements *differently*. . . ."). Contrary to these arguments, the terms used in the statute are not limited to monetary payments. *See supra* note 57 and accompanying text. Moreover, these arguments ignore Congress' specification that the franchise fee includes "*any* tax, fee, or assessment *of any kind*," essentially reading this expansive language out of the statute. For example, although Anne Arundel County *et al*. argue "that generally, taxes, fees, and assessments are monetary, but that in exceptional circumstances (such as forfeitures) non-monetary obligations may also qualify," there is nothing in the statute—which specifically applies to a tax, fee, or assessment *of any kind*—or in the definition of these terms that supports this statement. *See* Anne Arundel County *et al*. July 24, 2019 *Ex Parte* at 7.

[62] *Montgomery County*, 863 F.3d at 491.

[63] *See supra* note 42 (defining and providing examples of "cable-related, in-kind contributions").

[64] *See Second FNPRM*, 33 FCC Rcd at 8960, para. 17 (citing *Montgomery County*, 863 F.3d at 490-91; *First Report and Order*, 22 FCC Rcd at 5149, para. 105). *See also* NCTA Reply at 5-6. *But see* Comments of the National Association of Telecommunications Officers and Advisors *et al*., at 8 (Nov. 14, 2018) (NATOA *et al*. Comments). Contrary to the contention of NATOA *et al*., the Commission's finding in the *First Report and Order* that in-kind contributions unrelated to the provision of cable services are franchise fees subject to the statutory five percent cap was undisturbed by subsequent court decisions in *Alliance* and *Montgomery County*. The court in *Montgomery County* vacated the orders to the extent they treat *cable-related*, in-kind exactions as franchise fees, and thus the Commission's finding with regard to in-kind contributions unrelated to the provision of cable services still stands.

[65] *See First Report and Order*, 22 FCC Rcd at 5149-50, paras. 105-08. In the *First Report and Order*, the Commission cited examples of in-kind contributions unrelated to the provision of cable services from the record, including requests for traffic light control systems, scholarships, and video hookups for a holiday celebration. *See First Report and Order*, 22 FCC Rcd at 5149-50, paras. 106-07.

[66] 47 U.S.C. § 542(g)(1).

[67] *See* Comments of the American Cable Association, at 4 (Nov. 14, 2018) (ACA Comments); Comments of NCTA (continued….)

Net-related exclusion. Since Congress enacted the PEG and I-Net provisions at the same time it added the franchise fee provisions, it could have explicitly excluded all costs related to PEG and I-Nets if it had intended they not count toward the cap.[92] Instead, they just excluded a subset of those costs. Further, if we were to interpret the statute such that all costs related to PEG, I-Nets, or other requirements imposed in section 611 are excluded from treatment as franchise fees because section 611(b) contemplates that such costs be incurred, the specific exemption for PEG capital costs in section 622(g)(2)(D) would be superfluous.[93] While we acknowledge that PEG channels and I-Nets provide benefits to consumers,[94] such benefits cannot override the statutory framework, which carves out only limited exclusions from franchise fees.

21. Next, we do not find persuasive the argument that section 626 of the Act "reflects the fact that cable-related franchise requirements are not franchise fees."[95] Section 626 directs franchising authorities to consider, among other things, whether a cable operator's franchise renewal proposal "is reasonable to meet the future cable-related community needs and interests, taking into account the cost of meeting such needs and interests."[96] NATOA *et al*. contend that if cable-related, in-kind requirements are included as franchise fees, "it would be the LFA who pays for them, rendering the cost consideration in this Section obsolete."[97] We disagree with this reasoning.[98] As NCTA explains, "[t]he cost/benefit analysis required under this provision underscores that Congress intended franchising authorities to balance the desire for any in-kind exactions requested by parties in the renewal process against the overall franchise fee burdens on cable operators and subscribers."[99] The section 626 assessment does not lose its purpose if cable-related, in-kind contributions are counted as franchise fees; as part of this assessment, for example, a franchising authority could determine that cable-related community needs and interests can be met at a lower cost to cable subscribers than the full five percent franchise fee.[100] Moreover, the community needs assessment in section 626 also accounts for items that are not in-kind contributions subject to the franchise fee cap, such as build-out requirements.[101]

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– The Internet & Television Association, at 41-42 (Nov. 14, 2018) (NCTA Comments).

[68] *See supra* note 59 and accompanying text. *But see* Comments of Anne Arundel County, Maryland *et al*., at 20 (Nov. 14, 2018) (Anne Arundel County *et al*. Comments). Anne Arundel County *et al*. make the conclusory statement that "[r]egulatory obligations are clearly not a tax or fee," without citing a definition of these terms or including the term "assessment," and they make no mention of the court's own conclusion in *Montgomery County* that the term franchise fee "can include noncash exactions." *See Montgomery County*, 863 F.3d at 490-91.

[69] *See* ACA Comments at 5-6.

[70] *See supra* notes 50-51. We analyze and interpret these two PEG-related exclusions in Section III.A.2.b, *infra*.

[71] *See* Reply Comments of the American Cable Association, at 14 (Dec. 14, 2018) (ACA Reply). According to Anne Arundel County *et al*., the Commission incorrectly implies that "unless something falls within an exception, it must be a tax, fee, or assessment." *See* Anne Arundel County *et al*. Comments at 19. However, this is inconsistent with our analysis, in which we first evaluate whether a type of contribution meets the definition of franchise fee in section 622(g)(1) and, if so, then determine whether it falls within a specified exception in section 622(g)(2). It is also inconsistent with our conclusion herein that certain requirements, such as customer service and build-out requirements, are not covered by the definition of franchise fee. *See infra* Section III.A.2.d.

[72] *See* ACA Comments at 5.

[73] *See id*.

[74] *See* NATOA *et al*. Comments at 5; Reply Comments of the National Association of Telecommunications Officers and Advisors *et al*., at 3 (Dec. 14, 2018) (NATOA *et al*. Reply); Anne Arundel County *et al*. July 24, 2019 *Ex Parte* at 12. *See also* Anne Arundel County *et al*. Comments at 17-18 ("The subsections in 622(g)(2) are designed to *permit* collection of additional fees that otherwise might be misinterpreted to fall within the cap. The exceptions to (continued….)

22. Finally, we disagree with commenters that cite a provision in section 622 that relates to itemization on customer bills as evidence that Congress did not intend PEG-related franchise obligations to be included in franchise fees. In particular, LFA commenters point to section 622(c)(1), which specifies that cable operators may identify as a separate line item on each subscriber bill each of the following: (1) the amount of the total bill assessed as a franchise fee and the identity of the franchising authority to which the fee is paid; (2) the amount of the total bill assessed to satisfy any requirements imposed on the cable operator by the franchise agreement to support PEG channels or the use of such channels; and (3) the amount of any other fee, tax, assessment, or charge of any kind imposed by any governmental authority on the transaction between the operator and the subscriber.[102] LFA commenters argue that "[t]hrough this language, Congress clearly outlined a separation between franchise fees and cable-related, in-kind fees."[103] On the contrary, "the fact that Section 622(c) allows cable operators to itemize certain charges on subscriber bills has no bearing on which charges meet the definition of franchise fees under Section 622(g)."[104] While section 622(g) was adopted as part of the 1984 Cable Act, Congress adopted section 622(c) years later in 1992 to promote transparency by allowing cable operators to inform subscribers about how much of their total bill is made of charges imposed by local governments through the franchising process.[105] By differentiating the types of charges that can be itemized on subscriber bills, there is no indication that Congress intended to exclude certain charges from the franchise fee.[106]

23. Having established our interpretation of section 622(g), we adopt our tentative conclusion that this treatment of cable-related, in-kind contributions should be applied to both new entrants and incumbent cable operators.[107] As the Commission has previously observed, section 622 "does not distinguish between incumbent providers and new entrants."[108] We affirm our belief that applying the same treatment of cable-related, in-kind contributions to both new entrants and incumbent cable operators will ensure a more level playing field and that the Commission should not place its thumb on the scale to give a regulatory advantage to any competitor.[109]

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the definition of franchise fee are expansions of LFA authority, and do not narrow the definition of franchise fees."); Comments of the City of New York, at 9-10 (Nov. 14, 2018) (City of New York Comments); Reply Comments of the State of Hawaii, at 2 (Dec. 14, 2018) (Hawaii Reply).

[75] For example, under section 622(g)(2)(B), payments required by the franchise to be made by the cable operator for, or in support of the use of, PEG access facilities are included in the franchise fee only for franchises granted after October 30, 1984.

[76] *See* ACA Comments at 8.

[77] *Second FNPRM*, 33 FCC Rcd at 8960, para. 17. According to NCTA, the legislative history shows that Congress' intent generally was to *limit* the total financial obligations that franchising authorities may impose on cable operators. *See* NCTA Reply at 7 ("But Congress adopted the five percent cap as a *limit* 'to prevent local governments from taxing private cable operators to death as a means of raising local revenues for other concerns.'") (citing 129 Cong. Rec. S8254 (1983), statement of Sen. Goldwater). *See also* NCTA Comments at 39-40. We find that allowing LFAs to circumvent the statutory five percent cap by not counting cable-related, in-kind contributions that clearly fall within the statutory definition of franchise fees would be contrary to Congress' intent as reflected in the broad definition of franchise fee in the statute. *See Second FNPRM*, 33 FCC Rcd at 8961, para. 17.

[78] *Second FNPRM*, 33 FCC Rcd at 8960, para. 17 (citing H.R. Rep. No. 934, 98th Cong., 2nd Sess. 1984 at 64, *reprinted in* 1984 U.S.C.C.A.N. 4655, 4701).

[79] H.R. Rep. No. 934, 98th Cong., 2nd Sess. 1984 at 64-65.

[80] *Id*. at 65.

[81] Although the City of New York opines that the examples of franchise fees in the legislative history are all "services that do not use the cable operator's cable system or other communications facilities ('CF') or call on the core competencies ('CC') of the cable operator," this reading overlooks the fact that certain PEG-related costs are (continued….)

24. We disagree with the contention that our interpretation of the franchise fee definition in section 622(g) is impermissible under *Chevron*.[110] Charles County, Maryland posits that "[b]ecause Congress has directly addressed the questions at issue by employing precise, unambiguous statutory language in Section 622 of the Act, the FCC's proposed rules re-imagining . . . what constitutes a 'franchise fee' are impermissible," as "[o]nly Congress may alter or amend federal law."[111] Charles County does not offer an explanation for why the statutory language is unambiguous beyond arguing that the words "tax, fee, or assessment" in the definition are terms of art.[112] But regardless of whether these are terms of art, they can include non-monetary contributions, as the Sixth Circuit observed.[113] And we believe that our interpretation of this language using traditional tools of statutory construction is a reasonable and permissible construction of the statute that effectuates Congressional intent for the reasons set forth above.[114] Indeed, it is the interpretation that is most consistent with the plain meaning of the statutory definition of franchise fee.

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included as franchise fees, and it creates a distinction that is not apparent from either the statute or the legislative history. *See* City of New York Comments at 4.

[82] *Id*. *See* Comments of the Alliance for Communications Democracy *et al*., at 6 (Nov. 14, 2018) (CAPA Comments); Comments of The City Coalition, at 13-14 (Nov. 14, 2018) (City Coalition Comments); Comments of the State of Hawaii, at 3-4 (Nov. 14, 2018) (Hawaii Comments); NATOA *et al*. Comments at 5; City of New York Comments at 3; Anne Arundel County *et al*. Reply at 6; Reply Comments of Free Press, at 4-5 (Dec. 14, 2018) (Free Press Reply); Hawaii Reply at 4-5; NATOA *et al*. Reply at 3. We discuss further in Section III.A.2.b below the extent to which certain PEG-related requirements are exempted from the statutory definition of franchise fees.

[83] *See also* NCTA Reply at 5, n.12 (stating that "[a]s the context makes clear, this language is meant only to elaborate on what Congress considers a 'fee' under the definition of franchise fee, and not what constitutes an 'assessment,' the latter of which Congress understood to include in-kind exactions"). For the same reason, we are not persuaded by Anne Arundel County *et al*.'s reliance on a letter from the Commission's Cable Services Bureau that quotes the legislative history. *See* Anne Arundel County *et al*. Comments at 23-24 (citing *City of Bowie*, 14 FCC Rcd 9596 (Cable Services Bureau, 1999)); Anne Arundel County *et al*. July 24, 2019 *Ex Parte* at 12; Letter from Sen. Chris Van Hollen to Chairman Ajit Pai, FCC at 2 (June 12, 2019). First, this Bureau-level letter does not bind the Commission. *See Comcast v. FCC*, 526 F.3d 763, 769 (D.C. Cir. 2008) (an agency is not bound by the actions of its staff if the agency has not endorsed those actions). Second, to the extent that the Bureau's guidance 20 years ago conflicts with the conclusions in this rulemaking, it is reversed and superseded. We note that the letter merely cites the statute and legislative history, without analysis.

[84] *See Montgomery County*, 863 F.3d at 490-91.

[85] *See, e.g.*, *Duncan v. Walker*, 533 U.S. 167, 174 (2001) ("It is our duty 'to give effect, if possible, to every clause and word of a statute.'" (quoting *United States v. Menasche*, 348 U.S. 528, 538–539 (1955))).

[86] *See, e.g.*, Comments of the City of Arlington, Texas, at 6-7 (Nov. 14, 2018) (City of Arlington Comments); Comments of the City of Austin, Texas, at 7-8 (Nov. 14, 2018) (City of Austin Comments).

[87] *See Second FNPRM*, 33 FCC Rcd at 8962, para. 20.

[88] 47 U.S.C. § 531(b) ("A franchising authority may in its request for proposals require as part of a franchise, and may require as part of a cable operator's proposal for a franchise renewal, . . . that channel capacity be designated
(continued….)

2. Specific Types of Cable-Related, In-Kind Contributions Under Section 622

25. In this section, we analyze whether specific types of cable-related, in-kind contributions are franchise fees subject to the five percent statutory cap under section 622. First, we find that costs attributable to franchise terms that require free or discounted cable service to public buildings are franchise fees, consistent with our tentative conclusion that treating all cable-related, in-kind contributions as franchise fees unless expressly excluded would best effectuate the statutory purpose. Next, we adopt our tentative conclusion that costs in support of PEG access are franchise fees, with the exception of capital costs as defined below. Similarly, we find that costs attributable to construction of I-Nets are franchise fees. Finally, we conclude that build-out and customer service requirements do not fall within the statutory definition of franchise fee.[115] Based on these conclusions with respect to specific types of costs, we adopt a definition of "in-kind, cable-related contributions" to include "any non-monetary contributions related to the provision of cable services provided by cable operators as a condition or requirement of a local franchise, including but not limited to free or discounted cable service to public buildings, costs in support of PEG access other than capital costs, and costs attributable to the construction of I-Nets. It does not include the costs of complying with build-out and customer service requirements."[116]

a. Free and Discounted Cable Service to Public Buildings

26. We find that costs attributable to franchise terms that require a cable operator to provide free or discounted cable service to public buildings, including buildings leased by or under control of the franchise authority, are cable-related, in-kind contributions that fall within the five percent cap on franchise fees. The record includes examples of cable operators providing cable service to public buildings as part of a franchise agreement.[117] Consistent with our statutory interpretation above, providing free or discounted cable service to public buildings is an in-kind (*i.e.*, non-monetary) contribution imposed on a cable operator by a franchise authority, and is not included in one of the enumerated exceptions from the franchise fee in section 622(g)(2).[118] Although certain commenters

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for public, educational, or governmental use, and channel capacity on institutional networks be designated for educational or governmental use. . . ."). *See also* 47 U.S.C. § 541(b)(3)(D) ("Except as otherwise permitted by sections 531 and 532 of this title, a franchising authority may not require a cable operator to provide any telecommunications service or facilities, other than institutional networks, as a condition of the initial grant of the franchise, a franchise renewal, or a transfer of a franchise.").

[89] Anne Arundel County *et al*. Comments at 15-16. *See also* AWC *et al*. Comments at 6-8; CAPA Comments at 3-4; Comments of the Illinois Municipal League, at 1-2 (Nov. 7, 2018); Comments of the International Municipal Lawyers Association, at 2 (Nov. 13, 2018) (IMLA Comments); Reply Comments of Media Alliance, at 4 (Nov. 19, 2018).

[90] *Second FNPRM*, 33 FCC Rcd at 8963, para. 20.

[91] *See* ACA Comments at 6; NCTA Reply at 7-8.

[92] We disagree with the Cable Act Preservation Alliance (CAPA) that "it is equally true that Congress could have explicitly noted the franchise fee limitation in 47 U.S.C. Section 531(b) if it had intended to include these PEG-related costs as franchise fees." CAPA Comments at 8. There was no need for Congress to specify which PEG-related costs are franchise fees in section 611 when the statute sets forth a standalone provision, section 622, that defines what is included in the franchise fee and specifically addresses PEG-related costs. *See* NCTA Reply at 14 ("Congress was not required to reiterate the limitations imposed by the five percent cap at every mention of permissible in-kind assessments in other provisions."). NATOA *et al*. argue that the Commission "ignores that build-out and customer service obligations also were enacted by Congress at the same time it added the franchise fee provisions and were not explicitly excluded from the cap, yet . . . finds these are not 'franchise fees.'" NATOA *et al*. July 24, 2019 *Ex Parte* at 3. However, we explain herein that Congress expressly stated that cable operators are responsible for the cost of constructing cable systems. *See infra* Section III.A.2.d. We also find herein that federally mandated customer service standards are not a "tax, fee, or assessment" and, thus, there was no need for Congress to exclude them from the franchise fee. *See id*.

emphasize that free and discounted cable services have been considered franchise considerations that are not subject to the five percent cap on franchise fees in past franchise agreements,[119] we find that our reading that free and discounted services count towards the franchise fee cap is a reasonable interpretation and best effectuates Congressional intent given that the statute defines franchise fee broadly, carving out only limited exclusions. If LFAs could circumvent the five percent cap by requiring unlimited free or discounted cable services for public buildings, in addition to a five percent franchise fee, this result would be contrary to Congress's intent as reflected in the broad definition of "franchise fee" in the statute.[120] We find that the Act does not provide any basis for treating the value attributable to free or discounted services in a different manner than other in-kind services which must be included in the franchise fee. Although we acknowledge that the provision of free or discounted cable service to public buildings, such as schools or libraries, can benefit the public, such benefits cannot override the statutory framework. Further, there are policy rationales for limiting free services, given that, in a competitive market, such contributions may raise the costs of the cable operator's service, reduce resources available for other services, and result in market inefficiency.[121]

b. PEG Access Facilities

27. We conclude in this section that in-kind contributions related to PEG access facilities are cable-related, in-kind contributions, and are therefore included within the statutory definition of "franchise fees" under section 622(g)(1).[122] We next conclude that the term "capital cost" in section 622(g)(2)(C) should be given its ordinary meaning, which is a cost incurred in acquiring or improving a capital asset. Applying that interpretation, we conclude that the exclusion for capital costs under section 622(g)(2)(C) could include equipment that satisfies this definition, regardless of whether such equipment is purchased in connection with the construction of a PEG access facility. We then conclude that the record is insufficiently developed for the Commission to determine whether the provision of PEG channel capacity is included within section 622(g)(2)(C)'s exclusion for capital costs. We also find that the

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[93] *See* ACA Comments at 6-7.

[94] *See infra* Sections III.A.2.b (PEG), III.A.2.c (I-Nets).

[95] NATOA *et al*. Comments at 7.

[96] 47 U.S.C. § 546(c)(1)(D).

[97] NATOA *et al*. Comments at 7-8.

[98] *See* CAPA Comments at 8-9; Charles County Comments at 10-11; City of New York Comments at 5-6; City of Philadelphia *et al*. Comments at 30; Comments of the Telecommunications Board of Northern Kentucky, at 9-10 (Nov. 14, 2018) (TBNK Comments); Reply Comments of the Alliance for Communications Democracy *et al*., at 6-7 (Dec. 24, 2018) (CAPA Reply); Reply Comments of the City of Hagerstown, Maryland, at 8-9 (Dec. 13, 2018) (City of Hagerstown Reply); Reply Comments of the City of Newton, Massachusetts, at 9-10 (Dec. 14, 2018).

[99] NCTA Reply at 10-11.

[100] *See id*. at 11. *See also* Reply Comments of NTCA—The Rural Broadband Association, at 3 (Dec. 14, 2018) ("The Commission's tentative conclusion in no way restricts the 'in-kind' contributions franchising authorities can impose on cable operators, provided such contributions are cable-related and limited in value to the overall level of the cap. As a result, franchise authorities can continue to condition cable operators' franchise authority upon fulfilling certain community needs; they may just have to be more tailored and precise in value than is currently the practice."). As Congress noted when it adopted the five percent cap, the Commission capped franchise fees at three percent of a cable operator's revenue. H.R. Rep. 98-934, 1984 U.S.C.C.A.N. at 4663; *see* 47 CFR § 76.31 (1984).

[101] Build-out requirements are subject to section 626's directive to assess reasonableness while taking into account the cost of such requirements, and a build-out requirement requested by an LFA could be challenged under section 626. *See* NCTA Comments at 51.

[102] 47 U.S.C. § 622(c).

installation of PEG transport facilities are capital costs that are exempt from the five percent franchise fee cap,[123] and that maintenance of those facilities are operating costs that count toward the cap. Finally, we address policy arguments regarding the impact of these conclusions on the provision of PEG programming.

(i) The Franchise Fee Definition Generally Includes Contributions for PEG Access Facilities

28. Consistent with our tentative conclusion in the *Second FNPRM*,[124] we find that the definition of franchise fee in section 622(g)(1) encompasses PEG-related contributions. Like other taxes, fees, or assessments imposed by LFAs, we find that contributions related to PEG access facilities imposed by an LFA are subject to the five percent cap on franchise fees, unless they fall within one of the five exclusions set forth in section 622(g)(2). Consistent with the statutory analysis above, we conclude that the provision of equipment, services, and similar contributions for PEG access facilities are cable-related, in-kind contributions that meet the definition of franchise fee.[125] Such PEG-related contributions are not exempt under section 622(g)(2) of the Act unless they fall under the limited exceptions for capital costs and costs incurred by franchises existing at the time of the Cable Act's adoption in 1984.[126] As explained above, our starting point for analyzing cable operator contributions to LFAs is that the Act defines "franchise fee" broadly and has limited, narrow exceptions. Thus, we believe that including in the franchise fee cap any costs that are not specifically exempt is consistent with the statute and reasonably effectuates Congressional intent.

29. Further, including contributions for PEG access facilities within the franchise fee definition is consistent with the overall structure of section 622. For "any franchise in effect on October 30, 1984," section 622(g)(2)(B) excludes from the definition of "franchise fee" "payments which are required by the franchise to be made by the cable operator during the term of such franchise for, or in support of the use of [PEG] access facilities."[127] There would have been no reason for Congress to

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[103] City of Arlington Comments at 9. *See also* City of Austin Comments at 10; CAPA Comments at 10; NATOA *et al*. Comments at 5-6; TBNK Comments at 5-6.

[104] NCTA Reply at 12.

[105] *Id*. at 12-13 (citing *Implementation of Sections of The Cable Television Consumer Protection and Competition Act of 1992; Rate Regulation*, Report and Order and Further Notice of Proposed Rulemaking, 8 FCC Rcd 5631, 5967, para. 545 (1993)).

[106] Moreover, as NCTA observes, "[t]he fallacy that Section 622(c) distinguishes franchise fees from other exactions, as NATOA and others claim, is underscored by the fact that subsection (c)(3) repeats virtually *verbatim* Section 622(g)(1)'s broad definition of a franchise fee. Yet, by NATOA's logic, the itemization of a cost under subsection (c)(3) would control its treatment for franchise fee purposes, *removing* it from the very definition that Congress established for such fees in Section 622(g)(1) . . . ." *Id*. at 14, n.52.

[107] *See Second FNPRM*, 33 FCC Rcd at 8963-64, para. 22. *See also* NCTA Comments at 50.

[108] *Second Report and Order*, 22 FCC Rcd at 19637, para. 11. *See* Verizon Comments at 5; Altice Reply at 20.

[109] *See* Verizon Comments at 5-6. *See also* Reply Comments of Frontier Communications Corporation, at 3 (Dec. 14, 2018).

[110] Review of the FCC's interpretation of the statutes it administers is governed by *Chevron USA, Inc. v. Natural Resources Defense Council*, 467 U.S. 837 (1984).

[111] Charles City Comments at 5-8. *See also* IMLA Comments at 3; City of Philadelphia *et al*. Comments at 19-20; City of Hagerstown Reply at 7-8.

[112] *See* Charles City Comments at 5-8.

grandfather in these PEG-related contributions for existing franchises if such payments were not otherwise included within the definition of "franchise fees." In effect, excluding PEG-related contributions would read "in the case of any franchise in effect on October 30, 1984" out of section 622(g)(2)(B), extending this grandfathered exclusion to all franchises.

30. Some commenters claim that other sections of Title VI, including the section authorizing LFAs to require the designation of PEG channel capacity in section 611, override section 622's definition of "franchise fee."[128] As discussed above, we find these arguments unpersuasive.[129] We also reject arguments that provisions of the Act unrelated to cable franchising demonstrate that PEG-related fees are not franchise fees.[130] For example, section 623 of the Act, which governs the regulation of cable rates, instructs the Commission to take the following two factors (among others) into account when prescribing rate regulations:

> (v) the reasonably and properly allocable portion of any amount assessed as a franchise fee, tax, or charge of any kind imposed by any State or local authority on the transactions between cable operators and cable subscribers or any other fee, tax, or assessment of general applicability imposed by a governmental entity applied against cable operators or cable subscribers;
>
> (vi) any amount required [ ] to satisfy franchise requirements to support public, educational, or governmental channels or the use of such channels or any other services required under the franchise . . . .[131]

Commenters argue that the separate listing of franchise fees (in v) and the costs of PEG franchise requirements (in vi) is evidence that franchise fees do not include PEG-related costs.[132] We disagree. We note that that the question of which factors the Commission should consider in setting rate regulations is

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[113] *See Montgomery County*, 863 F.3d at 490-91.

[114] Where a "statute is silent or ambiguous" with respect to a specific issue, "the question" for the court is whether the agency has adopted "a permissible construction of the statute." *Chevron*, 467 U.S. at 843. *See also Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 980 (2005). *See* Free State Foundation Reply at 11.

[115] *See infra* Section III.A.2.d.

[116] *See Second FNPRM*, 33 FCC Rcd at 8964, para. 24. We modify the definition slightly from what was proposed in the *Second FNPRM* to reflect the conclusions adopted herein.

[117] *See, e.g.*, Comments of the City of Newton, Massachusetts, at 19 (Nov. 14, 2018) (City of Newton Comments).

[118] *See* 47 U.S.C. § 542(g)(2); *supra* para. 11.

[119] *See, e.g.*, AWC *et al*. Comments at 7 (arguing that "[t]he Commission has acknowledged local authority to include additional franchise considerations within the franchise," and that requiring LFAs to pay for these negotiated franchise considerations is inconsistent with precedent and decades of franchise agreements). AWC cites a Bureau-level order in which the Cable Services Bureau found that where the LFA and cable operator agreed to establish franchise provisions regarding the eligibility standards for a senior citizen discount rate and the formula for adjusting that rate, these terms were not preempted by federal law. *See City of Antioch, California*, Memorandum Opinion and Order, CSR-5239-R, 14 FCC Rcd 2285 (CSB 1999). While this decision is about the inclusion of discounted services in the franchise terms, it does not address whether discounted services should be included in the franchise fee and, thus, is not inconsistent with our findings herein.

[120] *See Second FNPRM*, 33 FCC Rcd at 8961, para. 17.

[121] *See* NCTA Comments at 50 ("[I]f products and services are available to a franchising authority without charge, or at a below-market rate, the franchising authority will not be required to evaluate a 'need' in light of its market cost, and as a result will tend to over-consume at the cable operator's buffet, resulting in market inefficiency.").

[122] PEG channels provide third-party access to cable systems through channels dedicated for use by the public, including local governments, schools, and non-profit and community groups. H.R. Rep. No. 98–934, at 30. The Act (continued….)

both legally and analytically distinct from the question of which costs are included as a franchise fee under section 622. Even if it were not, the separate listing of franchise fees and PEG-related exactions in section 623 does not indicate that Congress understood these categories to be mutually exclusive. In general, section 623(b) directs the Commission to consider several factors relating to cable operators' costs, revenue, and profits to ensure that the Commission sets "reasonable" rates.[133] Ensuring that a rate is "reasonable" requires a full consideration of the costs borne by cable operators. Listing only franchise fees would fail to account for some of these costs, even under the interpretation adopted in this Order: Franchise fees and PEG costs only partially overlap, given that section 622(g)(2) excludes certain PEG-related exactions from the definition of franchise fees.[134] We therefore find nothing inconsistent about the separate listing of franchise fees and PEG-related costs in section 623 and the interpretation of section 622(g) adopted in this Order. The same analysis applies to the bill-itemization requirements in section 622(c), which permits the separate itemization of franchise fees and PEG-related assessments in subscriber bills.[135]

(ii) Scope of Specific Franchise Fee Exclusions Related to PEG Access Facilities

31. Consistent with our tentative conclusions in the *Second FNPRM*,[136] we conclude (1) that PEG support payments for any franchise in effect on October 30, 1984 and (2) PEG capital costs for any franchise granted after October 30, 1984 are exempt from the definition of franchise fee. As discussed above, two provisions of section 622(g)(2) exclude certain costs associated with PEG access facilities from the definition of "franchise fee" in section 622(g)(1): First, section 622(g)(2)(B) excludes PEG support payments, but only with respect to franchises granted prior to 1984.[137] To the extent that any such franchises are still in effect, we affirm that under section 622(g)(2)(B), PEG support payments made pursuant to such franchises are excluded from the five percent franchise fee cap. Consistent with the statutory language and legislative history, we find this exclusion is broad in scope, and commenters did not dispute this interpretation in the record.[138]

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provides for the creation and support of PEG channels in various ways, including by authorizing LFAs to require franchisees to designate channel capacity for PEG, and by excluding certain costs associated with PEG access facilities from the definition of franchise fees under section 622(g)(2). *See* 47 U.S.C. §§ 522(16), 531, 542(g).

[123] As explained below, "PEG transport facilities" are facilities that LFAs use to deliver PEG services from studios or other locations where the programming is produced to the cable headend. *See infra* para. 49.

[124] *Second FNPRM*, 33 FCC Rcd at 8960, para. 16.

[125] In some cases, LFAs require a grant or other *monetary* contribution earmarked for PEG-related costs. *See*, *e.g.*, Altice May 9, 2019 *Ex Parte* at 7-8 (describing Altice's payment of "PEG grants" to LFAs). These monetary contributions are likewise subject to the five percent cap on franchise fees, unless otherwise excluded under section 622(g)(2). *See supra* note 54. Section 622 exempts only the items delineated in (g)(2), and Congress did not distinguish between in-kind and monetary contributions, nor did it exempt monetary contributions earmarked for a purpose that would otherwise not be excluded under section 622(g)(2). Thus, we make clear that monetary contributions—like in-kind contributions—must be counted toward the franchise fee cap unless expressly exempt under section 622(g)(2).

[126] *See* 47 U.S.C. § 542(g)(2); *supra* para. 11.

[127] 47 U.S.C. § 542(g)(2)(B).

[128] 47 U.S.C. § 531(b). *See, e.g.*, Reply Comments of Charles County, Maryland, at 7 (Dec. 14, 2018) (Charles County Reply); Reply Comments of Massachusetts Community Media, Inc., at 8 (Dec. 14, 2018) (MassAccess Reply) ("Cable operators cannot classify as 'in-kind' an obligation which they are legally bound to fulfill.").

[129] *See supra* paras. 20-22.

[130] *See* CAPA Comments at 11. *See also* City of Newton Apr. 10, 2019 *Ex Parte* at 2.

32. Second, for any franchise granted after 1984, section 622(g)(2)(C) contains a narrower exclusion covering only PEG "capital costs which are required by the franchise to be incurred by the cable operator for [PEG] access facilities."[139] The Cable Act does not define "capital costs". We address the scope of this exclusion below by first clarifying the definition of "capital costs" and concluding that it can apply to contributions for both construction-related and non-construction-related contributions to PEG access facilities. We then determine that the record is insufficient to determine whether costs associated with providing PEG channel capacity are subject to this exclusion, and we discuss the application of the exclusion to PEG transport.

33. *Definition of "capital costs."* Although the Commission previously asserted with respect to section 622(g)(2)(C) that "[c]apital costs refer to those costs incurred in or associated with the construction of PEG access facilities," we now revisit that interpretation and provide additional clarity on the definition of this term.[140] As described below, we find that the term "capital costs" is not limited to construction-related costs; rather, it generally encompasses costs incurred in acquiring or improving capital assets for PEG access facilities.[141] The Commission's previous reading of the phrase "capital costs" was based in part on section 622(g)'s legislative history, which states that the Cable Act excludes from the franchise fee cap "the capital costs associated with the construction of [PEG] access facilities."[142] The Sixth Circuit affirmed the Commission's prior reading in *Alliance*, where, rejecting a challenge to the Commission's construction of the term "capital costs" in the *First Report and Order*, the court held that:

> [t]o determine the permissibility of the Commission's construction of Section 622(g)(2)(C), we start by consulting the legislative history. During the enactment of this provision, Congress made clear that it intended Section 622(g)(2)(C) to reach "capital costs *associated with the construction* of [PEG] access facilities." H.R.Rep. No. 98–934, at 26 (emphasis added). Against this legislative pronouncement, the FCC's limitation of "capital costs" to those "incurred in or associated with the construction of PEG access

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[131] *See* 47 U.S.C. § 543(b)(2).

[132] CAPA Comments at 11 ("If Congress had intended that the amounts required to satisfy franchise requirements be subject to, and included in, the five percent franchise fee cap, Congress's direction that the Commission consider these [factors in Section 623(b)(2)(C)] as separate factors makes no sense.").

[133] 47 U.S.C. § 542(b)(1).

[134] *Id*. § 542(g)(2)(C).

[135] *Id*. § 542(c). Several commenters raised section 622(c) as evidence that franchise fees do not include PEG-related assessments. *See, e.g.*, Anne Arundel County *et al*. Comments at 11; NATOA *et al*. Comments at 6; Hawaii Reply at 2. We note that section 622(c) was adopted years after section 622(g) was enacted. *See generally* NCTA Reply at 12-13 (discussing the legislative history of section 622(c)); Cable Television Consumer Protection and Competition Act, Pub. L. No. 102–385, §§ 3, 9, 14, 106 Stat. 1460 (1992).

[136] *Second FNPRM*, 33 FCC Rcd at 8962, para. 19.

[137] 47 U.S.C. § 542(g)(2)(B) (excluding, "in the case of any franchise in effect on [October 30, 1984], payments which are required by the franchise to be made by the cable operator during the term of such franchise for, or in support of the use of, public, educational, or governmental access facilities").

[138] *See Second FNPRM*, 33 FCC Rcd at 8962, para. 19. The legislative history further supports this interpretation. H.R. Rep. No. 98-934, at 65 (1984) ("For existing franchises, a city may enforce requirements that additional payments be made above the 5 percent cap to defray the cost of providing public, educational and governmental access, including requirements related to channels, facilities and support necessary for PEG use.").

[139] 47 U.S.C. § 542(g)(2)(C) (excluding, "in the case of any franchise granted after [October 30, 1984], capital costs which are required by the franchise to be incurred by the cable operator for public, educational, or governmental access facilities").

facilities" represents an eminently reasonable construction of Section 622(g)(2)(C).[143]

34. We asked for additional comment on the definition of "capital costs" under section 622(g)(2)(C) in the *Second FNPRM*.[144] Arguably, the Commission's previous construction left unsettled the extent to which the "capital costs" exclusion encompassed PEG equipment—such as vans, studios, or cameras. In *Alliance*, the Sixth Circuit observed that the Commission's definition of capital costs could encompass the costs of such equipment, but only insofar as the equipment costs were "relate[d] to the construction of PEG facilities."[145] But neither the *First Report and Order* nor the legislative history from which it borrowed expressly *limited* capital costs to *construction-related* capital costs. Both statements are silent—or, at most, unclear—about the treatment of *non-construction-related* capital costs.

35. Based on the arguments in the record and our further consideration of the statutory text and legislative history we now conclude that the Commission's earlier statement regarding the definition of "capital costs" was overly narrow. As commenters note, many local governments receive payments from cable operators that are not simply for the construction of PEG studios, but also for, among other things, the acquisition of equipment needed to produce PEG access programming.[146] LFAs argue for a broader definition of "capital costs" that would include PEG channel capacity and certain equipment costs associated with PEG access facilities.[147] By contrast, cable companies have urged the Commission to reaffirm, based on its previous statement, that "capital costs" are limited to costs associated with the *construction* of PEG access facilities (and thus do not include channel capacity and equipment such as cameras, or other equipment necessary to run a PEG access facility).[148]

36. In general, when a term is undefined in a statute, courts look to that term's "ordinary meaning."[149] While there is no general definition of the precise term "capital costs," *Black's Law Dictionary* defines a similar term,[150] "capital expenditure," as "[a]n outlay of funds to acquire or improve a fixed asset," and defines a "fixed asset," or "capital asset" as "[a] long-term asset used in the operation

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[140] *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992*, First Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 5101, 5150-51, para. 109 (2007).

[141] *See infra* paras. 33-41.

[142] *See* H.R. Rep. No. 98–934, at 26 (making clear that Congress intended section 622(g)(2)(C) to reach "capital costs associated with the construction of [PEG] access facilities.").

[143] *All. for Cmty. Media v. FCC*, 529 F.3d 763, 784 (6th Cir. 2008).

[144] The *Second FNPRM* noted that "capital costs which are required by the franchise to be incurred by the cable operator for [PEG] access facilities" are excluded from the definition of franchise fee, and sought comment on treating the costs of studio equipment as capital costs for the purpose of this exemption from the franchise fee cap. *See Second FNPRM*, 33 FCC Rcd at 8962, para. 19 & n.95.

[145] *All. for Cmty. Media v. FCC*, 529 F.3d 763, 784 (6th Cir. 2008) ("Instead, the Commission underscores that the central test for determining whether an expense is a capital cost is whether it is 'incurred in or associated with the construction of PEG access facilities.' (*Id*.) This definition could potentially encompass the cost of purchasing equipment, as long as that equipment relates to the construction of actual facilities.").

[146] *See, e.g.*, NCTA Reply, Appendix (*Examples of Franchising Authority Overreach*) at 7 & n.2 (noting that New York City provides that public-access-related exactions may be designated for, among other things, "studio and portable production equipment, editing equipment and program playback equipment, cameras, [and] office equipment").

[147] *See, e.g.*, CAPA Comments at 15-16 ("The costs of acquiring studio equipment clearly are capital costs. Studio equipment has a useful life of several years, and the cost of acquiring such equipment is capitalized. And these costs (continued….)

of a business or used to produce goods or services, such as equipment, land, or an industrial plant."[151] *Merriam-Webster* similarly defines "capital expenditure" as "costs that are incurred in the acquisition or improvement of property (as capital assets) or that are otherwise chargeable to a capital account," and defines "capital assets" as "long-term assets either tangible or intangible (as land, buildings, patents, or franchises)."[152] An accounting textbook provides yet another similar definition:

> Expenditures for the purchase or expansion of plant assets are called capital expenditures and are recorded in asset accounts. . . . In brief, any material expenditure that will benefit several accounting periods is considered a *capital expenditure*. Any expenditure that will benefit only the current period or that is not material in amount is treated as a *revenue expenditure*.[153]

We also note that *capital* costs are distinct from *operating* costs (or operating expenses), which are generally defined as expenses "incurred in running a business and producing output."[154] Reflecting this distinction, the Commission has distinguished between costs incurred in *building* of PEG facilities, which are capital costs, and costs incurred in *using* those facilities, which are not.[155]

37. While we may also look to legislative history or other context in ascertaining a statute's meaning,[156] none of these sources here compels a narrower definition than that set forth above. The legislative history is ambiguous: The passage relied on by the Commission in the *First Report and Order*, from a summary in the House Report, notes that "capital costs associated with the construction of [PEG] access facilities are excluded from the definition of a franchise fee."[157] But section 622(g)(2)(C) does not itself restrict capital costs to costs that are construction related, nor does this passage in the legislative history expressly say that the capital costs exclusion is *limited* to such costs. And, as some commenters recognize, not all capital costs related to PEG access facilities are related to construction: studio equipment, vans, and cameras, often have useful lives of several years, and the costs of acquiring such equipment are often capitalized.[158] Such costs therefore often fall within the ordinary meaning of

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are equally clearly for PEG access facilities."); Anne Arundel County *et al*. Reply at 13-14 (noting that capital expenditures commonly include, for example, "everything from repairing a roof, to building, to purchasing a piece of equipment, or building a brand new factory"). Similarly, several commenters argue that section 611's grant of authority to require PEG channels suggests that the cost of such channels cannot count toward the five percent franchise fee cap. Charles County Comments at 15 ("Section 611 of the Act is unambiguous that PEG channels and PEG capacity are PEG capital costs, not franchise fees subject to the statutory five percent cap."); CAPA Comments at 8 (noting that "Congress could have explicitly noted the franchise fee limitation in 47 U.S.C. Section 531(b) if it had intended to *include* these PEG-related costs as franchise fees."). We disagree with the notion that the Act's grant of authority to require designation for PEG use necessarily excludes the costs of PEG from the definition of franchise fees. As we note above, the fact that the Act authorizes LFAs to impose such obligations does not mean that the value of these obligations should be excluded from the five percent cap on franchise fees. *See supra* para. 20. Section 622 governs "Franchise Fees" and makes clear that any items *not* expressly excluded from that section's broad definition of franchise fees are included against the statutory cap. Section 622 excludes some—but not all—PEG-related costs.

[148] NCTA Comments at 47-48 ("Accordingly, the Commission should confirm that PEG capital costs include only construction of PEG facilities (not cameras, playback devices and other equipment), including construction costs incurred in or associated with a PEG return line from the PEG studio to the operator's facility, and that any additional asks (including transport costs) are not part of the statutory exemption and must count towards the franchise fee cap.").

[149] *Taniguchi v. Kan Pac. Saipan, Ltd*., 566 U.S. 560, 566 (2012) ("When a term goes undefined in a statute, we give the term its ordinary meaning."); *Sorenson Commc'ns, LLC v. FCC*, 897 F.3d 214, 228 (D.C. Cir. 2018) ("Because § 225 does not define 'efficient,' we give the term its ordinary meaning." (citing *Taniguchi*)).

[150] Costs and expenditures are related, but not identical, concepts. *Black's Law Dictionary* defines "cost" as "the (continued….)

capital costs. Had Congress wished to exclude such costs, it could have done so by narrowing the definition of "capital costs" in the statute.

38. Consistent with our analysis above, we find that the phrase "capital costs" in section 622(g)(2)(C) should be interpreted in a manner consistent with its ordinary meaning. Based on the definitions discussed above, the term "capital cost" generally would be understood to mean a cost incurred in acquiring or improving a capital asset. Because the ordinary meaning of this term is not limited to construction-related costs, we now find that the definition of "capital costs" as used in section 622(g)(2)(C) is not limited to costs "incurred in or associated with the construction of PEG access facilities."[159] We conclude that while capital costs *include* costs associated with the construction of PEG access facilities, they are not *limited* to such costs.[160]

39. The ordinary meaning of "capital costs" could encompass the acquisition of a non-construction-related capital asset—such as a van or a camera. Section 622(g)(2)(C) only excludes certain capital costs—those "which are required by the franchise to be incurred by the cable operator for [PEG] access facilities."[161] Section 602(16) defines PEG access facilities as "channel capacity . . . and facilities *and equipment* for the use of such channel capacity."[162] In the legislative history, Congress explains that "[t]his may include vans, studios, cameras, or other equipment relating to the use of public, educational, or governmental channel capacity."[163] Based on this statutory language and legislative history as well as the current record, we believe at the present time that the definition of "capital costs" in section 622(g)(2)(C) includes equipment purchased in connection with PEG access facilities, even if it is not purchased in conjunction with the construction of such facilities.[164] But, as both sections 622(g)(2)(c) and 602(16) make clear, the capital costs of such equipment may be excluded only insofar as they are for the use of PEG channel capacity.[165]

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amount paid or charged for something; price or expenditure." Black's Law Dictionary (10th ed. 2014). *Black's* relevantly defines "expenditure" as "a sum paid out." *Id*. While we recognize that "cost" and "expenditure" have distinct meanings in the accounting context, for the purposes of our interpretation of section 622(g)(2)(C), we find that the meanings of these terms are highly analogous—*i.e.*, both pertain to expending resources to acquire a capital asset. *See also Rosebud Enterprises, Inc. v. Idaho Pub. Utilities Comm'n,* 128 Idaho 624, 628, 917 P.2d 781, 785 (1996) ("Capital costs include costs of constructing and installing generating equipment and facilities and the financial carrying costs associated with the utility's investment in the facility. Once incurred, these investment costs are assumed to be "fixed" and will not vary with changes in the actual amount of generation."); 42 CFR § 412.302 (defining "capital costs" to mean, in the Medicare context, "allowable capital-related costs for land and depreciable assets" including depreciation and capital-related interest expense).

[151] Black's Law Dictionary (10th ed. 2014). *Cf.* Collins English Dictionary, https://www.collinsdictionary.com/us/dictionary/english/capital-cost (last accessed May 6, 2019) (defining "capital cost" as "a cost incurred on the purchase of land, buildings, construction and equipment to be used in the production of goods or the rendering of services").

[152] Merriam-Webster, Definition of "Capital Expenditure," www.merriam-webster.com (accessed Apr. 15, 2019).

[153] Williams *et al*., Financial & Managerial Accounting: The Basis for Business Decisions 396-97 (14th ed. 2008).

[154] Black's Law Dictionary (10th ed. 2014) (operating expense).

[155] *First Report and Order*, 22 FCC Rcd at 5150-51, para. 109.

[156] *See, e.g.*, *AT&T Corp. v. Ameritech Corp.*, Memorandum Opinion & Order, 13 FCC Rcd 21438, para. 28 (1998) ("Accordingly, using the traditional tools of statutory construction, we look next to the context in which the term is (continued….)

40. This interpretation seems most faithful to the text of section 622(g)(2)(C), which does not restrict capital costs to those that are related to construction. We recognize that this interpretation reflects a broader sense of capital costs than described in the *First Report and Order*. To the extent that our interpretation today is inconsistent with the Commission's earlier statements about the capital cost exclusion, we find that the interpretation in this Order better comports with the Act's language, structure, and policy objectives.[166]

41. We disagree with NCTA's assertion that there would have been "no good reason" to grandfather PEG equipment—such as vans and cameras—if such equipment were "subject to the permanent exception from franchise fees under section 622(g)(2)(C)."[167] The statute itself *fully* excludes PEG obligations for franchises in effect on October 30, 1984, but excludes only PEG-related *capital costs* for franchises granted after that date.[168] The broader exclusion for existing franchises in section 622(g)(2)(B) reflects the legislative intent to grandfather the provisions of existing PEG franchises.[169] Section 622(g)(2)(C) provides a narrower exclusion for new franchises than the broad exclusion enjoyed by grandfathered existing franchises; one would therefore expect these two exclusions to overlap, but not be coextensive. Even under our interpretation of section 622(g)(2)(C), section 622(g)(2)(B) remains a much broader exclusion than section 622(g)(2)(C): a number of costs—most notably, operating expenses—would still be excluded by section 622(g)(2)(B), but not by section 622(g)(2)(C).[170]

42. *PEG channel capacity.* While we find that the costs associated with the provision of PEG channel capacity are cable-related, in-kind costs that fall within the definition of "franchise fee," we find that the record is insufficiently developed to determine whether such costs should be excluded from the franchise fee as a capital cost under the exemption in section 622(g)(2)(C). The *Second FNPRM* stated that, while the Act authorizes LFAs to require that channel capacity be designated for PEG use, this authorization does not necessarily remove the costs of such obligations from the five percent cap on franchise fees.[171] In the record in this proceeding, cable operators generally agreed with this statement,[172] and LFAs generally disagreed.[173] As discussed above, the Act's authorization of a franchise obligation

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used and any relevant legislative history to determine a reasonable meaning."); *In the Matter of Enf't of Section 275(a)(2) of the Commc'ns Act of 1934, As Amended by the Telecommunications Act of 1996, Against Ameritech Corp.*, 13 FCC Rcd 19046, para. 11 (1998) ("When the meaning of a statute is ambiguous, it is appropriate to turn to legislative history for guidance.").

[157] *See* H.R. Rep. No. 98-934, at 19 (1984), as reprinted in 1984 U.S.C.C.A.N. 4655, 4656.

[158] *See, e.g.*, CAPA Comments at 15 ("The costs of acquiring studio equipment clearly are capital costs. Studio equipment has a useful life of several years, and the cost of acquiring such equipment is capitalized. And these costs are equally clearly for PEG access facilities.").

[159] *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992*, First Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 5101, 5150-51, para. 109 (2007).

[160] We agree with NATOA that franchising authorities should be given an opportunity to show that franchise fees are being spent on PEG capital costs if a cable operator requests an offset against franchise fees for non-monetary, cable-related franchise provisions. Letter from Nancy Werner, General Counsel, NATOA, to Marlene H. Dortch, Secretary, FCC at 2 (July 24, 2019) (NATOA July 24, 2019 *Ex Parte*).

[161] 47 U.S.C. § 542(g)(2)(C) (excluding, "in the case of any franchise granted after [October 30, 1984], capital costs which are required by the franchise to be incurred by the cable operator for public, educational, or governmental access facilities").

[162] *See id*. § 522(16) (emphasis added).

[163] H.R. Rep. No. 98–934, at 45.

[164] We note that this view was affirmed by the Sixth Circuit in *Alliance*. 529 F.3d at 785 (finding that "the (continued….)

(*e.g.*, one related to PEG access facilities or I-Nets) does not remove that obligation from the five percent cap on franchise fees.[174] It follows, then, that the costs associated with providing PEG channel capacity fall within this cap as a cable-related, in-kind contribution unless they are otherwise excluded under section 622(g)(2).[175]

43. LFAs claim that the costs of providing PEG channel capacity do fall within section 622(g)(2)(C)'s exclusion for PEG-related capital costs. In support, they point out that the Act defines "[PEG] access facilities" as "(A) channel capacity designated for public, educational, or governmental use; and (B) facilities and equipment for the use of such channel capacity."[176] Thus, they assert, because section 622(g)(2)(C) expressly applies to costs incurred by a cable operator for "[PEG] access facilities," it necessarily applies to costs associated with PEG channel capacity.[177] But, as the cable operators state, the Act's inclusion of channel capacity in the definition of "[PEG] access facilities" does not settle the question of whether channel capacity costs fall under section 622(g)(2)(C). This is because section 622(g)(2)(C) excludes only a particular subset of PEG access facility costs—capital costs—from the definition of franchise fees subject to the five percent cap, and cable operators claim that PEG channel capacity is not a capital cost.[178] Moreover, even assuming that PEG channel capacity is not a capital cost and is therefore subject to the five percent cap, the record reveals serious difficulties regarding how to calculate the value of PEG channel capacity to account for this cost.[179]

44. Given this, we find that the questions raised by channel capacity are complex, and that the record is not developed enough to allow us to answer them. We therefore defer this issue for further consideration.[180] In the meantime, we find that the status quo should be maintained, and that channel capacity costs should not be offset against the franchise fee cap. This approach will minimize disruption and provide predictability to both local franchise authorities and cable operators.

45. *Limits on LFA Authority to Establish PEG Requirements.* While we do not reach a conclusion with respect to the treatment of PEG channel capacity, we reiterate here that sections 611(a)

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unambiguous expression of Congress confirms that 'PEG access capacity' extends not only to facilities but to related equipment as well").

[165] *See* 47 U.S.C. § 542(g)(2)(C) (excluding only capital costs "*for* public, educational, or governmental access facilities" (emphasis added)); *id.* § 522(16) (defining PEG access facilities as "channel capacity . . . and facilities and equipment *for the use of such channel capacity*" (emphasis added)).

[166] NCTA requests that we "make clear that cable operators have the right to audit a franchising authority's use of the contributions and that a franchising authority must provide reasonable supporting documentation during an audit that such funds are, or were, being used for PEG capital expenses." NCTA Comments at 49. We decline to do so. We find nothing in the Act that precludes a cable operator from auditing an LFA's use of PEG capital funds, nor do we find anything that gives a cable operator an audit right. We note that under section 635(b) of the Act, a court may award a cable operator the right to audit if the court finds that relief appropriate. 47 U.S.C. § 555(b).

[167] NCTA Mar. 11, 2019 *Ex Parte* at 3.

[168] *Compare* 47 U.S.C. § 542(g)(2)(B) *with id.* § 542(g)(2)(C).

[169] H.R. Rep. No. 98-934 at *45 (1984). *See also id*. at *46 ("[P]rovisions of existing franchises covering PEG channel capacity and its use as well as services, facilities and equipment (such as studios, cameras, and vans) related thereto, are fully grandfathered.").

[170] Salaries and training are two examples of operating costs excluded by section 622(g)(2)(B), but not by section 622(g)(2)(C). *See First Report and Order*, 22 FCC Rcd at 5151, para. 109 ("[Capital] costs are distinct from payments in support of the use of PEG access facilities. PEG support payments may include, but are not limited to, salaries and training.").

[171] *See Second FNPRM*, 33 FCC Rcd at 8962-63, para. 20.

[172] *See, e.g.*, ACA Comments at 6 ("[T]he fact that subsection 611(b) authorizes LFAs to require franchisees to designate channel capacity on institutional networks ('I-Nets') for governmental use does not exempt the costs (continued….)

and 621(a)(4)(B) of the Act restrict the authority of LFAs to establish PEG channel capacity requirements.[181] We discussed the limits imposed by section 611(a) in the *First Report and Order*.[182] We noted that, while section 611(b) does not place a limit on the amount of channel capacity that a franchising authority may require, section 621(a)(4)(b) provides that a franchising authority may require "adequate assurance" that the cable operator will provide "adequate" PEG access channel capacity, facilities, or financial support.[183] We determined that "adequate," as used in the statute, should be given its ordinary meaning—"satisfactory or sufficient."[184]

46. In the *Second FNPRM*, the Commission again discussed the limits on franchising authority requirements for PEG channels under section 611(b), identifying PEG channel capacity as an in-kind contribution and seeking comment on the effects on cable operators and cable subscribers of "allowing LFAs to seek unlimited" PEG operating support and other cable-related, in-kind contributions.[185] In response, commenters submitted examples of what they claim are LFA requirements for excessive numbers of PEG channels.[186] LFAs responded with comments defending such requirements, as well as requirements for associated PEG support.[187]

47. We note that many states have attempted to strike a balance between the costs of PEG channels to cable operators and the benefits of PEG channels to the public by imposing reasonable limits on PEG channel capacity. For example, some states have limited the number of PEG channels—typically to two or three.[188] Others have required that PEG channels be returned if they are not substantially used.[189] States have also tied the number of appropriate PEG channels to the size of the population served.[190]

48. We decline the invitation by cable operators to establish fixed rules as to what constitutes "adequate" PEG channel capacity under section 621(a)(4)(B).[191] We recognize that the number of channels necessary to further the goals of the Cable Act might vary depending on, among other things, the number of subscribers within a franchise, the area covered by a franchise, the number of cable

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incurred to provide that capacity from treatment as franchise fees.").

[173] *See* Charles County Reply at 7; MassAccess Reply at 8 ("Cable operators cannot classify as 'in-kind' an obligation which they are legally bound to fulfill.").

[174] *See supra* para. 20.

[175] One commenter notes that California law requires "all video service providers"—a category broader than just cable providers—to "designate a sufficient amount of capacity" for the provision of PEG channels. *See* Comments of the City and County of San Francisco, California Comments, at 8-9 (Nov. 14, 2018) (City and County of San Francisco Comments) (quoting Cal. Pub. Util. Code § 5870(a)). Because this requirement applies to more than just cable operators, commenters argue, it is a fee of "general applicability" excluded under section 622(g)(2)(A) from the definition of franchise fee. *See id.* The Eastern District of California recently held that a CPUC fee under the same California law was a fee of general applicability on these grounds. *Comcast of Sacramento I, LLC v. Sacramento Metropolitan Cable Television Commission*, 250 F. Supp. 3d 616 (E.D. Cal. 2017). The Ninth Circuit recently vacated and remanded this ruling on other grounds. *Comcast of Sacramento I, LLC v. Sacramento Metro. Cable Television Comm'n*, 923 F.3d 1163 (9th Cir. 2019). An assessment aimed only at cable or cable-like services would not fall within section 622(g)(2)(A)'s exclusion as a "tax, fee, or assessment of general applicability." The text of section 622(g)(2)(A) of the Cable Act identifies a "tax, fee, or assessment imposed on *both* utilities and cable operators or their services" as a paradigmatic example of an assessment of "general applicability." 47 U.S.C. § 542(g)(2)(A) (emphasis added). The legislative history further explains that an assessment of "general applicability" "could include such payments as a general sales tax, an entertainment tax imposed on other entertainment business as well as the cable operator, and utility taxes or utility user taxes which, while they may differentiate the rates charged to different types of utilities, do not unduly discriminate against the cable operator as to *effectively constitute a tax directed at the cable system*." H.R. Rep. No. 98-934, at 64 (1984) (emphasis added). Here, the provision of PEG capacity appears to be an obligation specific to cable operators—the California law itself references the provision of PEG capacity by "cable operator[s]." Cal. Pub. Util. Code § 5870(a). We also note that the PEG authority provided in section 611 only applies to cable service, and that there are no PEG requirements under federal law for other video providers, like Direct Broadcast Service (DBS) or over-the-top streaming services.
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operators within a franchise, the area's population and geography, the cable-related community needs and interests, and whether PEG channel capacity is substantially used.[192] In general, each of these factors is relevant in determining whether an LFA has exceeded its authority under section 621(a)(4)(B) by demanding more than "adequate" capacity.[193] We note that LFA demands for PEG capacity requirements that are more than "adequate" are subject to judicial challenge under section 635 of the Act, as well as other forms of relief.[194] We also reserve the right to establish fixed rules in the future should there be widespread evidence of LFAs requiring more than adequate PEG channel capacity.

49. *PEG transport.* We find that the installation of transport facilities dedicated for long-term use by a PEG provider for the transmittal of recurring programming to a cable headend or other point in the cable system—PEG transport—does not count toward the five percent franchise fee cap. For the reasons explained above, we find that exempting capital costs from the five percent cap is consistent with the Act. The expenditure for the installation of a system that carries PEG programming from a PEG studio to a cable operator's headend facility is a capital expenditure because it is a long-term asset meant to deliver the programming.[195] The ongoing costs associated with the maintenance or operation of that facility would not qualify as a capital expenditure, however, as these are operating costs that are necessary to run the business and produce output.[196] NCTA requests that we declare PEG transport costs beyond "a single PEG transport return line [that] is dedicated to connecting the PEG studio to the cable network or headend" to count toward the five percent cap.[197] Although we agree that the costs associated with the use of transport lines for "episodic" or "short-term" PEG programming is an operating cost that is subject to the franchise fee cap,[198] we decline to establish a fixed quantity of PEG transport return lines that is "adequate" under section 621(a)(4)(B).[199] Like the number of PEG channels on a system, the number of adequate return lines in a franchise area might vary according to particular circumstances like the number of subscribers in the franchise area, the area covered by the franchise and the number of cable operators in the franchise. The number also might vary depending on the number of PEG channels provided in a franchise area and the types of programming offered over them. Nevertheless, any LFA requests for

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In any case, we need not settle the question whether a specific state law is of general applicability to determine whether the provision of PEG capacity, in general, falls within the definition of "franchise fee." Accordingly, we decline to do so here. *See infra* para. 94.

[176] *See* 47 U.S.C. § 522(16). *See also* NATOA *et al*. Reply at 6-7 ("Thus, by its very terms, the Cable Act excludes from franchise fees the costs of "facilities and equipment" that facilitate use of PEG channel capacity.").

[177] *See, e.g.*, Anne Arundel County *et al*. Comments at 16-17.

[178] *See, e.g.*, NCTA Mar. 11, 2019 *Ex Parte* at 2 (making this argument, and noting that "the structure of Section 622(g)(2)(B)-(C) makes clear that not all costs related to PEG access facilities are capital costs").

[179] NCTA proposes valuing channel capacity at market cost; anything less, NCTA argues, would be an additional subsidy beyond the cost of the service itself. *See* NCTA Comments at 51, 54 ("If in-kind exactions are valued only at incremental costs to the cable operator, the provider is still subsidizing them – a result that is contrary to Congress's goals of limiting the overall amount a provider is required to give to the community and that works against the Commission's goals of ensuring that providers can put funds to their highest and best use, including for broadband deployment."). LFAs raise a host of problems with using the fair market value approach to value channel capacity. *See, e.g.*, MassAccess Reply at 11 ("The 'fair market value' of PEG channels and PEG capacity, however, is zero dollars."); Charles County Comments at 21 & n.74 ("Since PEG capacity has no commercial value, the only cost to the cable operator for providing such capacity is the capital cost of provisioning PEG channels."); AWC *et al*. Comments at 14 (noting that assessing fair market value to PEG channel capacity would leave LFAs without objective and sufficient guidelines for valuation).

[180] *See U.S. Cellular Corp. v. FCC*, 254 F.3d 78, 86 (D.C. Cir. 2001) ("[A]gencies need not address all problems in one fell swoop." (citations and internal quotation marks omitted)). We encourage parties to supplement the record on the channel capacity issue. To the extent that we are provided sufficient information to answer the complex questions raised by channel capacity, we intend to resolve them in the next twelve months.

[181] 47 U.S.C. §§ 531(a), 541(a)(4)(b).

multiple transport connections dedicated for long-term PEG use that the cable operator considers to be more than "adequate" are subject to judicial challenge under section 635 of the Act.[200]

(iii) Policy Concerns and the Impact on PEG Programming

50. We acknowledge the benefits of PEG programming and find that our interpretations adopted above are faithful to the policy objectives of the Cable Act. A significant number of comments in the record stressed these benefits, which include providing access to the legislative process of the local governments, reporting on local issues, providing a forum for local candidates for office, and providing a platform for local communities—including minority communities.[201] Of course, Congress itself similarly recognized the importance of PEG programming by authorizing LFAs to require the provision of PEG channel capacity in the Cable Act,[202] and by carving out certain costs of such programming from the five percent cap on franchise fees.[203] Nothing in this proceeding disturbs the Commission's longstanding view that PEG programming serves an important role in local communities.[204]

51. At the same time, the Cable Act seeks to encourage deployment and competition by limiting the franchise fees that LFAs may collect.[205] These include limitations on imposing costs associated with the provision of PEG programming.[206] A number of cable operators express concern with excessive LFA requirements for PEG channel capacity, support, and in-kind contributions.[207] Altice, for example, notes that "PEG operational contributions . . . are common and routinely treated as separate from the 5 percent franchise fee."[208] Commenters likewise suggest that these excessive PEG-related demands can hinder competition and deployment.[209]

52. The Cable Act itself, as interpreted in this Order, balances these costs and benefits. By excluding PEG-related capital costs from the five percent cap on franchise fees, but leaving other PEG-related exactions subject to that cap, the Cable Act divides the financial burden of supporting PEG programming between LFAs and cable operators.[210] By counting a portion of these costs against the

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[182] *First Report and Order*, 22 FCC Rcd at 5152, para. 112.

[183] 47 U.S.C. § 541(a)(4)(B).

[184] *First Report and Order*, 22 FCC Rcd at 5152, para. 112 (quoting American Heritage Dictionary, Second College Edition (1991)). Citing section 621(a)(1)'s prohibition on franchising authorities from "unreasonably" refusing to award competitive franchises, the Commission found that, as a general matter, PEG support required by an LFA in exchange for a franchise should be limited to what is reasonably necessary to support "adequate" PEG facilities. *Id*. at 5153, para. 115. Based on that reasoning, the *First Report and Order* found certain LFA requirements regarding PEG channels to be unreasonable, including (1) duplicative PEG requirements; or (2) requiring a new entrant to pay PEG support in excess of the incumbent's obligations. *Id*. at 5154, paras. 119-20.

[185] *Second FNPRM*, 33 FCC Rcd at 8963-64, paras. 20, 23.

[186] *See* NCTA Reply, Appendix (*Examples of Franchising Authority Overreach*) at 10-11 (describing LFA demands ranging from seven to as many as 43 PEG channels).

[187] *See, e.g.*, Minnesota Association of Community Telecommunications Administrators Mar. 5, 2019 *Ex Parte* at 2-3.

[188] *See*, *e.g.*, Kan. Stat. § 12-2023(5)(B)(h)(1) (establishing limit of two PEG channels); N.R.S § 711.810 (Nevada) (establishing limit of three PEG channels); Mo. Rev. Stat § 67.2703 (same); O.C.G.A § 36-76-8 (Georgia) (same); LA. RS 45:1369 (Louisiana) (same); Ohio Rev. Code. § 1332.30 (same); S.C. Code Ann. § 58-12-370 (same); Tenn. Code Ann. § 7-59-309(e) (same); Tex. Util. Code § 66.009(c) (same); Wisc. Stat. § 66.0420(5)(a) (same).

[189] *See, e.g.*, Fla. Stat. § 610.109(5) (PEG channels must be "activated and substantially used" for "at least 10 hours per day on average, of which at least 5 hours must be non-repeat programming as measured on a quarterly basis," excluding "[s]tatic information screens or bulletin-board programming"; and requiring the return of PEG capacity if

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statutory cap on franchise fees that LFAs may collect, the Cable Act allows LFAs to seek support for PEG programming from cable operators, while guarding against the possibility that LFAs will make demands for such programming without regard to cost.

53. Some commenters have suggested that the proposals in the *Second FNPRM* threaten to eliminate or drastically reduce PEG programming.[211] We disagree. Significantly, any adverse impact of our ruling on PEG programming should be mitigated by (1) the expansion of the "capital cost" exclusion beyond merely capital costs associated with construction[212]; and (2) our decision to defer ruling on whether the costs of channel capacity may be counted under this exclusion.[213] Under the interpretation adopted in this Order, cable operators will continue to provide support where an LFA chooses, but some aspects of that support will now be properly counted against the statutory five percent franchise fee cap, as Congress intended.[214] We recognize that this represents a departure from the longstanding treatment of PEG costs by LFAs and cable operators. We do not, however, believe that these conclusions will eliminate PEG programming. Nor do we believe that the existing practice was lawful merely because it was longstanding: the Commission's duty is to conform its rules to law, not tradition.

54. To the extent that existing practices are inconsistent with the law, LFAs will still have a choice: they can continue to receive monetary franchise payments up to the five percent cap, they can continue to receive their existing PEG support and reduce the monetary payments they receive, or they can negotiate for a reduction of both that fits within the bounds of the law that Congress adopted.

c. I-Nets

55. We find that the costs associated with the construction, maintenance, and service of an I-Net fall within the five percent cap on franchise fees. Such costs are cable-related, in-kind contributions that meet the definition of franchise fee. In particular, agreeing to construct, maintain, and provide I-Net service pursuant to the terms of a franchise agreement is necessarily cable-related, is an in-kind (*i.e.*, non-monetary) contribution imposed on a cable operator by a franchise authority, and is not included in one of the enumerated exceptions from the franchise fee in section 622(g)(2) of the Act.[215] Thus, we believe that

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these criteria are not met); Cal. Pub. Util. Code § 5780(e) (requiring the return of PEG capacity to the cable operator where the channel "is not utilized by the local entity for at least eight hours per day as measured on a quarterly basis"); Wis. Stat. § 66.0420(5)(b)(1)(a)-(b) (requiring the return of PEG capacity that is not "substantially utilized by the municipality," defined as providing "40 hours or more of programming on the PEG channel each week and at least 60 percent of that programming is locally produced"). *See also* NCTA Apr. 18, 2019 *Ex Parte* at 6, n.28.

[190] *See, e.g.*, O.C.G.A § 36-76-8 (maximum of two PEG channels where the population is less than 50,000, and maximum of three PEG channels elsewhere); Wisc. Stat. § 66.0420(5) (same); N.R.S § 711.810 (same, but using 55,000 population as the inflection point); Tenn. Code Ann. § 7-59-309 (maximum of one PEG channel where the population is less than 25,000, maximum of two PEG channels where the population is greater than 25,000 but less than 50,000, and maximum of three PEG channels where the population exceeds 50,000).

[191] *See, e.g.*, Altice May 9, 2019 *Ex Parte* at 9 ("Given the uncertainty around the valuation of channel capacity on cable systems for PEG use, the Commission should consider adopting a rebuttable presumption under Section 621(a)(4)(B) that providing three linear standard-definition PEG channels satisfies a cable operator's obligations under Section 611(a), unless state law requires fewer channels." (citations omitted)). As noted in paragraph 45, the Commission concluded that "adequate" should be given its plain meaning, "satisfactory or sufficient" in the *First Report and Order*. *First Report and Order*, 22 FCC Rcd at 5152, para. 112. The Sixth Circuit affirmed this interpretation. *All. for Cmty. Media*, 529 F.3d at 785.

[192] *See, e.g.*, LFA Comments at 12 (discussing the need for a greater number of PEG channels where a franchise covers a large area with many cable operators). *See also* 47 U.S.C. § 546(a)(1)(A), 546(c)(1)(D) (discussing cable renewal standards).

[193] LFAs argue that relying on the section 621 "adequate" standard conflicts with the standards established by section 626 in the context of franchise renewals, which generally ask whether a renewal proposal is reasonable to meet the "needs and interests" of the community. *See* Anne Arundel County *et al*. July 24, 2019 *Ex Parte* at 8. We see no such conflict. Section 621 establishes "General Franchise Requirements," and nothing in Section 626

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including such services in the franchise fee is consistent with the statute.[216] As we tentatively concluded in the *Second FNPRM*, treating cable-related, in-kind contributions, such as I-Net requirements, as franchise fees would not undermine provisions in the Act that authorize or require LFAs to impose cable-related obligations on franchisees.[217] We disagree with LFA commenters who argue that the cost of I-Nets should be excluded from the franchise fee.[218] Although such commenters contend that "[t]he Commission's proposal to require LFAs to pay for I-Nets . . . cannot be squared with the statute,"[219] it is entirely consistent with the statute to find that franchising authorities may impose cable-related requirements, such as requiring dedicated channel capacity on I-Nets, on cable operators, but also to find that funding for these franchise requirements applies against the five percent cap.[220] Similar to our conclusion with respect to PEG support, while we acknowledge that I-Nets provide benefits to communities,[221] such benefits cannot override the statutory framework, which carves out only limited exclusions from franchise fees.

56. Further, as we conclude above, we disagree with commenters that section 611(b) of the Act, which authorizes LFAs to require that channel capacity on I-Nets be designated for educational and governmental use, should be interpreted to exempt the costs of I-Nets from franchise fees.[222] There is no basis in the statutory text for concluding that section 611(b) imposes any limit on the definition of franchise fee.[223] Moreover, section 622(g) defines what is included in the franchise fee, and section 622(g)(2) carves out only limited exclusions for PEG-related costs and does not exclude I-Net-related costs. As we observe above,[224] since Congress enacted the PEG and I-Net provisions at the same time it added the franchise fee provisions, it could have explicitly excluded all costs related to I-Nets if it had intended they not count toward the cap.[225]

d. Build-Out and Customer Service Requirements

57. We conclude that franchise terms that require cable operators to build their systems to cover certain localities in a franchise area do not count toward the five percent cap.[226] As we explain

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suggests that these general limits do not apply in the context of a franchise renewal. *See* 47 U.S.C. §§ 541, 546. As NCTA points out, to find that franchise renewals are constrained only by section 626's "needs and interests" inquiry would mean, among other things, that franchise renewals would be unconstrained by the statutory cap on franchise fees in section 622. *See* NCTA July 25, 2019 *Ex Parte* at 6.

[194] 47 U.S.C. § 555(a) ("Any cable operator adversely affected by any final determination made by a franchising authority under Section 621(a)(1), 625 or 626 may commence an action within 120 days after receiving notice of such determination may be brought in—(1) the district court of the United States for any judicial district in which the cable system is located; or (2) in any State court of general jurisdiction having jurisdiction over the parties.").

[195] *See supra* para. 36 (distinguishing capital expenditures from operating expenditures).

[196] *Id*. *See also* NCTA July 18, 2019 *Ex Parte* at 2 ("the costs for using [a PEG] facility—and the costs for using capacity over shared facilities to transmit PEG programming—and not just the costs of maintenance of such facility, would be considered operating costs under the statute and the *Draft Order*. The fair market value of the use of such capacity, therefore, are costs that count against the franchise fee cap.").

[197] NCTA July 18, 2019 *Ex Parte* at 2; NCTA Comments at 47-48.

[198] NCTA July 29, 2019 *Ex Parte* at 2-3. *See also* Merriam-Webster, Definition of "Capital Expenditure," www.merriam-webster.com (accessed Apr. 15, 2019) (defining "capital assets" as "**long-term** assets either tangible or intangible"); *supra* para. 36.

[199] 47 U.S.C. § 541(a)(4)(B); NCTA July 18, 2019 *Ex Parte* at 2. We note, however, that NCTA cites a particularly egregious example of a "transport line [that] is used once a year for a Halloween parade" that seems well beyond what constitutes adequate facilities. NCTA July 29, 2019 *Ex Parte* at 1-2.

[200] 47 U.S.C. § 555(a) ("Any cable operator adversely affected by any final determination made by a franchising
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herein, Title VI establishes a framework that reflects a fundamental bargain between the cable authority and franchising authority—a cable operator may apply for and obtain a franchise to construct and operate facilities in the local rights-of-way and, in exchange, an LFA may impose fees and other requirements as set forth in the Act.[227] The statutory framework makes clear that the authority to construct a cable system is granted to the cable operator as part of this bargain and that the costs of such construction are to be borne by the cable operator. Specifically, section 621(a)(2)(B) of the Act provides that "[a]ny franchise shall be construed to authorize the construction of a cable system over public rights-of-way, and through easements, . . . except that in using such easements the cable operator shall ensure . . . that the cost of the installation, construction, operation, or removal of such facilities be borne by the cable operator or subscriber, or a combination of both."[228] Because the statute is clear that cable operators, not LFAs, are responsible for the cost of building out cable systems, it would be inconsistent with the statutory text and structure to count these costs as part of the franchise fee.[229] Both cable industry and LFA commenters generally support the contention that build-out obligations should not count toward the five percent franchise fee cap.[230]

58. We also conclude that franchise terms that require cable operators to comply with customer service standards do not count toward the five percent cap.[231] LFA commenters explain that cable operators are required to comply with customer service standards under federal or state law, and that cable franchises may include an obligation to comply with customer service standards.[232] Notably, section 632 of the Act directs the Commission to "establish standards by which cable operators may fulfill their customer service requirements," including "at a minimum, requirements governing—(1) cable system office hours and telephone availability; (2) installations, outages, and service calls; and (3) communications between the cable operator and the subscriber (including standards governing bills and refunds."[233] The Commission implemented this mandate in section 76.309 of its rules, which sets forth with specificity the customer service standards to which cable operators are required to adhere relating to cable system office hours and telephone availability, installations, outages and service calls, and communications between cable operators and cable subscribers.[234] We find that franchise terms that

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authority under Section 621(a)(1), 625 or 626 may commence an action within 120 days after receiving notice of such determination may be brought in—(1) the district court of the United States for any judicial district in which the cable system is located; or (2) in any State court of general jurisdiction having jurisdiction over the parties.").

[201] *See, e.g.*, ACT Comments at 3 (calling local PEG programming "critically important"); City Coalition Comments at 17-18 (noting, among other things, that PEG programming has become increasingly important and other sources of local news have experienced resource constraints and industry consolidation); Comments of Common Frequency, at 2 (Nov. 14, 2018) (Common Frequency Comments) ("PEGs also provide platforms for free speech, space for communities to organize, and serve as advocates for media access."); Comments of King County, Washington, at 9 (King County Comments) (noting that PEG channels provide important programming such as County Council meetings and programming targeted at minority communities); LMCTV Comments at 1-2 (citing the educational resources that PEG channels provide to the local community); Letter from Rony Berdugo, Legislative Representative, League of California Cities, to Ajit Pai, Chairman, FCC, at 2 (Oct. 30, 2018) ("PEG programming offers a host of community benefits, including public access channels, educational access channels, and government access channels all aimed at providing locally beneficial information."); City and County of San Francisco Comments at 2 (noting that SFGovTV provides "access to the legislative process," explains local issues, explores neighborhoods, and offers a forum for local candidates for office).

[202] 47 U.S.C. § 542(g)(2)(C) (excluding only PEG related "capital costs" from the definition of "franchise fees").

[203] *Id*. § 542(g)(2)(B)-(C). *See also* H.R. Rep. No. 98–934, at 30 ("Public access channels are often the video equivalent of the speaker's soap box or the electronic parallel to the printed leaflet. They provide groups and individuals who generally have not had access to the electronic media with the opportunity to become sources of information in the electronic marketplace of ideas. PEG channels also contribute to an informed citizenry by bringing local schools into the home, and by showing the public local government at work.").

[204] *Accessibility of User Interfaces, & Video Programming Guides & Menus*, Report and Order, MB Docket Nos. 12-108, 12-107, 28 FCC Rcd 17330, 17378, para. 75 (2013) ("We recognize the important role of PEG providers in (continued….)

require cable operators to adhere to customer service standards are not part of the franchise fee. In contrast to in-kind, cable-related contributions that are franchise fees subject to the statutory cap, such as the provision of free cable service to government buildings or PEG and I-Net support,[235] customer service obligations are not a "tax, fee, or assessment" imposed on a cable operator; they are regulatory standards that govern how cable operators are available to and communicate with customers. Indeed, as the legislative history explains, "[i]n general, customer service means the direct business relation between a cable operator and a subscriber," and "customer service requirements include requirements related to interruption of service; disconnection; rebates and credits to consumers; deadlines to respond to consumer requests or complaints the location of the cable operator's consumer service offices; and the provision to customers (or potential customers) of information on billing or services."[236] Based on our review of the statutory text and legislative history, we find no indication that Congress intended that standards governing a cable operator's "direct business relation" with its subscribers should count toward the franchise fee cap. Apart from ACA, no commenter argued that customer service obligations should be included as franchise fees.[237]

3. Valuation of In-Kind Contributions and Application to Existing Franchises

59. As we explain in this section, we conclude that cable-related, in-kind contributions will count toward the five percent franchise fee cap at their fair market value. Because we conclude above that most cable related, in-kind contributions must be included in the franchise fee, cable operators and LFAs must assign a value to them. In our prior rulemakings, we did not provide guidance on how to value such contributions,[238] but in the *Second FNPRM*, the Commission recognized that cable-related contributions could count toward the franchise fee cap at cost or at fair market value, and proposed to count toward the franchise fee cap at their fair market value.[239]

60. Most critiques of applying fair market valuation in this context challenge how it could be applied to PEG channel capacity.[240] But, as discussed above, we have not yet determined whether to

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informing the public, including those who are blind or visually impaired, on local community issues. . . .").

[205] 47 U.S.C. § 542. *See* Letter from Rep. Robert E. Latta, Member of Congress, *et al*., to Chairman Ajit Pai, FCC at 1 (July 22, 2019) ("The Cable Act carefully balanced the need to compensate communities for use of public rights-of-way with imperatives to expand services and limit costs for consumers.").

[206] 47 U.S.C. § 541(a)(4)(B).

[207] *See, e.g.*, Altice Reply at 7 (describing what it claims are excessive demands for PEG support); NCTA Reply, Appendix (*Examples of Franchising Authority Overreach*) at 9-11 (describing what NCTA argues are excessive LFA demands for PEG operational support, financial support, and channel capacity requirements).

[208] Altice Reply at 7.

[209] NCTA Comments at 43 (citing *First Report and Order*, 22 FCC Rcd 5149-50, paras. 105-08). *See also* Americans for Tax Reform May 8, 2019 *Ex Parte,* Att. at 3 (showing that extra-statutory exactions from cable operators "reduce the expected flow of revenues and/or increase the cost of an investment project, either of which reduces the net present value of an investment project and . . . attenuates capital investments").

[210] *See supra* paras. 38-41 (discussing the capital cost exclusion under section 622(g)(2)(C)).

[211] *See, e.g.*, Free Press Reply at 1 (noting that the proposal "threaten[s] PEG channel support"); NATOA *et al*. Comments at 10 (warning that "drastic reductions in franchise fees" will jeopardize the existence of PEG stations); Hawaii Comments at 7 ("Treating PEG channel capacity as a franchise fee would also result in an impossible choice for the State because the majority of the franchise fees that are currently collected are allocated to the PEG access organizations for their operating expenses"). This concern was also expressed in a number of letters from members of Congress. *See, e.g.*, Letter from Sen. M. Hirono to Ajit Pai, Chairman, FCC (Dec. 18, 2018) ("The proposed rulemaking, if adopted as currently proposed, would implement an overly broad definition of in-kind contributions
(continued….)

assign the value of PEG channel capacity contributions toward the five percent franchise fee cap, and therefore we do not need to address these arguments.

61. We must address the value of other in-kind contributions, however, including free service to public buildings and I-Net contributions. We believe that fair market value, where there is a product in the market,[241] is the most reasonable valuation for in-kind contributions because it is easy to ascertain—cable operators have rate cards to set the rates that they charge customers for the services that they offer. Moreover, a fair market valuation "reflects the fact that, if a franchising authority did not require an in-kind assessment as part of its franchise, it would have no choice but to pay the market rate for services it needs from the cable operator or another provider."[242] In contrast, valuing these in-kind contributions at cost would "shift the true cost of an exaction from their taxpayer base at large to the smaller subset of taxpayers who are also cable subscribers."[243] As we note above, Congress adopted a broad definition of franchise fee to limit the amount that LFAs may exact from cable operators.[244] Accordingly, we conclude that a fair market valuation for in-kind contribution best adheres to Congressional intent.

62. The franchise fee rulings we adopt in this Order are prospective.[245] Thus, cable operators may count only ongoing and future in-kind contributions toward the five percent franchise fee cap after the Order is effective. There is broad record support for applying the rulings prospectively; no commenter argues that our rulings should apply retroactively to allow cable operators to recoup past payments that exceed the five percent franchise fee cap.[246] To the extent a franchise agreement that is currently in place conflicts with this Order, we encourage the parties to negotiate franchise modifications within a reasonable time.[247] If a franchising authority refuses to modify any provision of a franchise agreement that is inconsistent with this Order, that provision is subject to preemption under section 636(c).

63. Many LFAs express concern that our rulings could disrupt their budgets, which rely upon the franchise fees that they expect to receive.[248] It is by no means clear from the record what fiscal

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in a way that would encourage cable providers to reduce the dollar contribution portion of the franchise fee. This would have the effect of constraining PEGs ability to serve the public as they have for decades."); Letter from Rep. G. Moore to Ajit Pai, Chairman, FCC, at 2 (Dec. 14, 2018) ("Under the FCC's proposal, Wisconsin municipalities will have a hard choice to make between crucial municipal services and purchasing a PEG channel for the use of the community."); Letter from Rep. E. Engel to Ajit Pai, Chairman, FCC (Dec. 13, 2018) ("I am concerned that the FCC's current proposal could jeopardize critical funding for public, educational, and governmental (PEG) stations.").

[212] *Compare supra* para. 40 *with Second FNPRM*, 33 FCC Rcd at 8962, para. 19.

[213] *Compare supra* para. 44 *with Second FNPRM*, 33 FCC Rcd at 8962-63, para. 20. NATOA *et al*. say that these aspects of our decision will not have a mitigating impact on the availability of PEG programming. *See* NATOA *et al*. July 24, 2019 *Ex Parte* at 4. They suggest that this Order "is not a boon to LFAs" because it was already clear that both construction-related and non-construction-related PEG equipment costs are exempt from the franchise fee cap. This is incorrect. As we explain above, the scope of the PEG capital cost exemption previously was left unsettled. *See supra* para. 34. This Order clarifies that issue by finding that equipment costs unrelated to construction may be considered capital costs for purposes of section 622(g)(2)(C).

[214] Finally, a number of commenters argue that PEG requirements confer a benefit on the community, like buildout requirements, and therefore should similarly not be considered a "contribution" to LFAs. We find that PEG requirements are distinguishable from buildout requirements for the reasons discussed below. *See infra* para. 57. PEG requirements, unlike buildout requirements, are also specifically discussed in the definition of franchise fee.

[215] *See* 47 U.S.C. § 542(g)(2); *supra* para. 11. *See also* 47 U.S.C. § 531(f) (defining an "institutional network" or I-Net as "a communications network which is constructed or operated by the cable operator and which is generally available only to subscribers who are not residential subscribers").

choices remain available to the LFAs, but in any event, delaying the effect of our decision to address this concern would not be consistent with the statutory text. It is strongly in the public interest to prevent the harms from existing franchise agreements to continue for years until those agreements expire.[249] In addition, the changes we adopt today were reasonably foreseeable because we largely adopt the tentative conclusions set forth in the *Second FNPRM*.[250] Finally, we note that LFAs can continue to benefit from their agreements by choosing to continue to receive their existing in-kind contributions, while reducing the monetary payments they receive.[251] Thus, consistent with the Act, we apply our rulings to future contributions cable operators make pursuant to existing franchise agreements.

B. Mixed-Use Rule

64. In this section, we address the second issue remanded from the Sixth Circuit in *Montgomery County*, which relates to the Commission's mixed-use rule. As explained above, the court in *Montgomery County* found that the Commission, in its *Second Report and Order* and *Order on Reconsideration*, failed to identify a valid statutory basis for its application of the mixed-use rule to incumbent cable operators because the statutory provision on which the Commission relied to do so – section 602(7)(C) of the Act – applies by its terms only to Title II carriers, and "many incumbent cable operators are not Title II carriers."[252] The court thus vacated and remanded the mixed-use rule as applied to those cable operators, directing the Commission "to set forth a valid statutory basis . . . for the rule as so applied."[253] For the reasons set forth below, we adopt our tentative conclusion that the mixed-use rule prohibits LFAs from regulating under Title VI the provision of any services other than cable services offered over the cable systems of incumbent cable operators, except as expressly permitted in the Act.[254]

65. Our conclusions regarding the scope of LFAs' authority to regulate incumbent cable

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[216] *See* NCTA Comments at 49-50. *See Second FNPRM*, 33 FCC Rcd at 8963, para. 20.

[217] *Second FNPRM*, 33 FCC Rcd at 8962-63, para. 20. *See supra* para. 20.

[218] *See, e.g.*, City of Arlington Comments at 9; Charles County Comments at 17-19.

[219] *See* Anne Arundel County *et al*. Comments at 17.

[220] *See, e.g.*, NCTA Reply at 9 (explaining that "Congress left to the franchising authority's discretion how best to allocate the franchise fee to reflect its community's particular cable-related needs"); *supra* para. 20.

[221] *See, e.g.*, Hawaii Comments at 8; City of Hagerstown Reply at 10-11. *See also* NATOA July 24, 2019 *Ex Parte* at 1 (arguing that this decision could "create significant public safety risks if, for example, [its] treatment of existing franchise obligations affects infrastructure such as institutional networks now being used for delivery of public safety services"). Anne Arundel County *et al*. contend that the obligation to provide I-Nets "benefits not only the public, but also the cable operator, who is in a position to sell commercial services via I-Nets," and they argue that the Commission "offers no explanation as to how such a mutually beneficial arrangement constitutes a tax." *See* Anne Arundel County *et al*. July 24, 2019 *Ex Parte* at 8. However, it is unclear from the record to what extent, if any, cable operators benefit from providing I-Nets. *See, e.g.*, NCTA Reply at 17 ("I-Nets, and other in-kind exactions serve no similar essential function for the provision of cable service to subscribers, but rather provide value to franchising authorities or particular third parties for purposes determined to be in the public interest by the franchising authority.").

[222] 47 U.S.C. § 531(b); *supra* para. 20.

[223] *See* ACA Comments at 6; NCTA Reply at 7-8.

[224] *See supra* para. 20.

[225] Anne Arundel County *et al*. suggests that our interpretation of the statute as it relates to I-Nets is somehow inconsistent with the Commission's holding in a 1996 open video systems order. *See* Anne Arundel County *et al*. July 24, 2019 *Ex Parte* at 12-13 (citing *Implementation of Section 302 of the Telecommunications Act of 1996; Open Video Systems*, Third Report and Order and Second Order on Reconsideration, 11 FCC Rcd 20227 (1996) (*OVS Order*)). Contrary to Anne Arundel County *et al*.'s assertion, the Commission did not conclude in the *OVS Order* that I-Nets were meant to be excluded from the franchise fee. Rather, that order affirmed the Commission's

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operators' non-cable services, facilities, and equipment follow from the statutory scheme. Congress in Title VI intended, among other things, to circumscribe the ability of franchising authorities to use their Title VI authority to regulate non-cable services provided over the cable systems of cable operators and the facilities and equipment used to provide those services. As explained below, the legislative history of the 1984 Cable Act and subsequent amendments to Title VI reflect Congress's recognition that cable operators potentially could compete with local telephone companies in the provision of telecommunications service and its intent to maintain the then-existing *status quo* concerning regulatory jurisdiction over cable operators' non-cable services, facilities, and equipment.[255] Under the *status quo*, regulation of non-cable services provided over cable systems, including telecommunications and information services, was the exclusive province of either the Commission or state public utility commissions.[256]

66. *The Mixed-Use Rule Prohibits LFAs From Regulating Under Title VI the Non-Cable Services, Facilities, and Equipment of Incumbent Cable Operators That Are Also Common Carriers.* As an initial matter, we reaffirm the Commission's application of the mixed-use rule to prohibit LFAs from using their cable franchising authority to regulate any services other than cable services provided over the cable systems of any incumbent cable operator that is a common carrier,[257] with the exception of channel capacity on I-Nets.[258]

67. As noted above, the Commission in the *First Report and Order* found that the then-existing operation of the local franchising process constituted an unreasonable barrier to new entrants in the marketplace for cable services and to their deployment of broadband, in violation of section 621(a)(1) of the Act.[259] The Commission adopted the mixed-use rule with respect to new entrants to address this unreasonable barrier. It provides, in relevant part:

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decision to preclude local franchising authorities from requiring open video system operators to build I-Nets, while also clarifying that this decision is not inconsistent with permitting the local franchising authority to require channel capacity on a network if an open video system operator does build one. *See OVS Order*, 11 FCC Rcd at 20290-91, paras. 146-47. As we explain above, it is entirely consistent with the statute to find that franchising authorities may impose cable-related requirements, such as requiring dedicated channel capacity on I-Nets, but also to find that funding for these requirements applies against the five percent cap.

[226] *See Second FNPRM*, 33 FCC Rcd at 8963, para. 21. Build-out requirements are requirements that a franchisee expand cable service to parts or all of the franchise area within a specified period of time. *See First Report and Order*, 22 FCC Rcd at 5107, para. 7.

[227] *See infra* para. 84.

[228] 47 U.S.C. § 541(a)(2)(B).

[229] Because the statute is clear with regard to cable operator responsibility for construction costs, we reject ACA's argument that "build-out obligations should only be excluded [from the franchise fee] to the extent an LFA needs to meet its obligation under paragraph 621(a)(3)" to assure that access to cable service is not denied to any group of potential residential cable subscribers because of the income of the residents of the local area in which such group resides. *See* ACA Comments at 7-8; 47 U.S.C. § 541(a)(3). *See also* Anne Arundel County *et al*. Reply at 9-11; CAPA Reply at 13.

[230] *See* Comments of the City of Murfreesboro, Tennessee, at 2 (Nov. 6, 2018) (City of Murfreesboro Comments); Comments of the City of Pasco, Washington, at 2 (Nov. 14, 2018); Comments of the City of Springfield, at 2 (Nov. 13, 2018); Anne Arundel County *et al*. Reply at 9-10; Free Press Reply at 5, NCTA Reply at 16. While some LFA commenters disagree with distinguishing between build-out obligations and other cable-related contributions such as PEG and I-Net support based on which entities receive the benefit of such obligations or whether such obligations can be considered "essential" to the provision of cable services, because we have clarified the rationale for excluding build-out obligations, we do not need to address these arguments. *See* AWC *et al*. Comments at 10-11; CAPA Comments at 12-13; Hawaii Comments at 10-11; City of Murfreesboro Comments at 2-3; NATOA *et al*. Comments at 6-7; City of New York Comments at 8-9; TBNK Comments at 7; Free Press Reply at 5-6; Hawaii Reply at 3-4. *See also* State of Hawaii July 22, 2019 *Ex Parte* at 1-4; Anne Arundel County, *et al*. July 24, 2019 *Ex*
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> LFAs' jurisdiction applies only to the provision of cable services over cable systems. To the extent a cable operator provides non-cable services and/or operates facilities that do not qualify as a cable system, it is unreasonable for an LFA to refuse to award a franchise based on issues related to such services or facilities. . . . [A]n LFA may not use its video franchising authority to attempt to regulate [an] entire network beyond the provision of cable services.[260]

68. The Commission in the *Second Report and Order* extended to incumbent cable operators several rules adopted in the *First Report and Order*, including the mixed-use rule.[261] Although, as noted, the Sixth Circuit in *Montgomery County* vacated and remanded the Commission's application of the mixed-use rule with respect to incumbent cable operators that are not common carriers, it left undisturbed application of the rule to incumbent cable operators that are also common carriers.[262] Consistent with the court's ruling, therefore, we adopt our tentative conclusion and reaffirm that the mixed-use rule prohibits LFAs from regulating the provision of non-cable services offered over the cable systems of incumbent cable operators that are common carriers.[263]

69. Our interpretation is consistent with the text of section 602(7)(C), which excludes from the term "cable system" "a facility of a common carrier which is subject, in whole or in part, to the provisions of Title II of this Act."[264] We are not persuaded by assertions to the contrary. Anne Arundel County *et al*. argues, for example, that a cable operator's provision of telecommunications services via its cable system (either directly or through a subsidiary) "does not . . . suddenly [transform its cable system] into a Title II facility" for purposes of applying the section 602(7)(C) common carrier exception.[265] City of Philadelphia *et al*. similarly argues that the common carrier exception in section 602(7)(C) was meant to protect Title II common carriers from regulation by LFAs under their Title VI franchising authority and thus cannot reasonably be read to apply to any cable operator that provides Title II and other non-cable services over a system that is a cable system.[266]

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Parte at 2-4; NATOA *et al*. July 25, 2019 *Ex Parte* at 5-6.

[231] In the *Second FNPRM*, we sought comment on whether there are other requirements besides build-out requirements that should not be considered contributions to an LFA. *See Second FNPRM*, 33 FCC Rcd at 8963, para. 21.

[232] *See* Anne Arundel County *et al*. Comments at 28 ("LFAs often impose obligations such as . . . minimum customer service obligations on cable operators that may still result in profit to the cable operator . . . but also do not directly serve county personnel or buildings."); *id*. at 29 (providing as an example the California state franchise, which requires state franchise holders to comply with customer service and protection standards); City of Newton Comments at 14 ("Under federal and state law, cable operators are required to comply with customer service standards. Cable franchise agreements include an obligation to comply with these customer service standards. Compliance with types of consumer-facing standards should not be treated as cable-related in-kind contributions."). *See also* NCTA Mar. 13, 2019 *Ex Parte* at 8 (observing that "neither the Commission nor the cable industry has suggested that . . . costs [of customer service obligations] should count toward the statutory cap").

[233] 47 U.S.C. § 552(b).

[234] 47 CFR § 76.309(c)(1)-(3).

[235] We clarify that if LFAs request build-out to an area that includes a public building, we would consider that to be a build-out requirement that is not subject to the franchise fee. However, we note that our conclusion with respect to build-out and customer service requirements is entirely separate from our findings regarding the provision of free or discounted services to public buildings and the provision of I-Net services. I-Net services as well as free or discounted services to public buildings are counted toward the franchise fee for the reasons explained above. *See supra* Sections III.A.2.a, III.A.2.c.

[236] H.R. Rep. No. 98-934, at 79 (1984), *as reprinted in* 1984 U.S.C.C.A.N. 4655, 4716.

70. To the extent these commenters argue that section 602(7)(C) precludes LFAs only from regulating non-cable services provided over the facilities of incumbent local exchange carriers that subsequently begin to provide cable service, we find such argument is not supported by the language of the statute. As noted in the *Second FNPRM*, although new entrants into the cable services market may confront obstacles different from those of incumbent cable operators, the statute makes no distinction between these types of providers.[267] In the absence of any textual basis for treating incumbent cable operators that provide telecommunications services differently from new entrants that do so, we conclude that a facility should be categorized as "a facility of a common carrier" under section 602(7)(C) so long as it is being used to provide some type of telecommunications service, irrespective of whether the facility was originally deployed by a provider that historically was treated as a "common carrier."

71. This interpretation also is consistent with the legislative history of the 1984 Cable Act. Although, as City of Philadelphia *et al*. points out, one of the concerns expressed in the legislative history was the potential that cable operators' provision of telecommunications services could enable large users of such services to bypass the local telephone companies and thereby threaten universal service,[268] the legislative history also reflects Congressional recognition that "ultimately, local telephone companies and cable companies could compete in *all* communications services."[269] The legislative history clarifies, moreover, that Congress intended the 1984 Cable Act to "maintain[] [then-]existing regulatory authority over all . . . communications services offered by a cable system, including . . . services that could compete with communications services offered by telephone companies."[270] Indeed, the legislative history is replete with statements reflecting Congress's intent to preserve the then-*status quo* regarding the ability of federal, state, and local authorities to regulate non-cable services provided via cable systems.[271] In light of its stated intention to maintain the jurisdictional *status quo*, we find that Congress intended via section 602(7)(C) to preclude LFAs from regulating under Title VI the provision of telecommunications services by incumbent cable operators, services that historically have been within the exclusive purview of the Commission (with respect to interstate services) or state public utility commissions (with respect to intrastate services).[272] Moreover, section 602(7)(C) broadly states that, with narrow exceptions, the

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[237] *See* ACA Reply at 17 (arguing that cable-related, in-kind contributions on any cable franchisee, other than capital costs for PEG access facilities, should count towards the franchise fee cap). For the reasons discussed above, we disagree with ACA that the costs of complying with mandated customer service standards should be counted toward the franchise fee cap.

[238] *First Report and Order*, 22 FCC Rcd at 5149-50, paras. 105-108.

[239] *Second FNRPM*, 33 FCC Rcd at 8964, para. 24.

[240] *See*, *e.g*., Anne Arundel County *et al.* Comments at 31; QC4 Comments at 5; CCSF Comments at 4-7; BNN Reply at 4.

[241] *See*, *e.g*., NCTA Comments at 53-55 (explaining that parties can establish the value of many services, including I-Net service, based on what "cable operators are charging third parties for a comparable service" and the "[m]arket value of equivalent services and equipment from the relevant cable operator"). We note that certain business or enterprise services may be comparable to I-Nets.

[242] NCTA Comments at 52. This demonstrates the flaw in NATOA *et al.*'s argument that we must provide guidance on how to calculate fair market value. *See* NATOA July 24 *Ex Parte* at 7. If the LFA believes that the cable operator's proposed valuation is too high, the LFA is free to forgo the in-kind contribution, accept a monetary franchise fee payment, and use the funds it received to purchase the good or service in the competitive marketplace.

[243] NCTA Reply at 19.

[244] *See supra* paras. 12-16. *See also* 129 CONG. REC. 15,461 (1983) (remarks of Senator Goldwater) ("[T]he overriding purpose of the 5-percent fee cap was to prevent local governments from taxing private operators to death as a means of raising local revenues for other concerns. This would be discriminatory and would place the private operator/owners at a disadvantage with respect to their competitors.")

[245] 5 U.S.C. § 551(4) ("'rule' means the whole or a part of an agency statement of general or particular applicability (continued….)

facility of a common carrier is only "considered a cable system to the extent such facility is used in the transmission of video programming directly to subscribers," and therefore not with respect to provision of any other services. For these reasons, we see no basis for altering our previous conclusion, as upheld by the Sixth Circuit,[273] that the mixed-use rule prohibits LFAs from exercising their Title VI authority to regulate the provision of non-cable services provided via the cable systems of incumbent cable operators that are common carriers, except as otherwise provided in the Act.

72. *The Mixed-Use Rule Prohibits LFAs From Regulating Under Title VI the Non-Cable Services, Facilities, and Equipment of Incumbent Cable Operators That Are Not Common Carriers*. We also adopt our tentative conclusion that LFAs are precluded from using their Title VI franchising authority to regulate the non-cable services (e.g., information services such as broadband Internet access) of incumbent cable operators that do not provide telecommunications services.[274] As directed by the court, we explain herein our statutory bases for concluding that LFAs lack authority under Title VI to regulate non-cable services of incumbent cable operators that do not provide telecommunications services.

73. Section 624 of the Act, which principally governs franchising authority regulation of services, facilities, and equipment, provides in subsection (a) that "[a] franchising authority *may not regulate* the services, facilities, and equipment provided by a cable operator *except to the extent consistent with [Title VI of the Act]*."[275] The subsequent provision, section 624(b)(1), provides that franchising authorities "may not . . . establish requirements for video programming or other *information services*."[276] Although the term "information service" is not defined in section 624, the legislative history of that provision distinguishes "information service" from "cable service."[277] In particular, the legislative history explains that "[a]ll services offered by a cable system that go beyond providing generally-available video programming or other programming are not cable services" and "a cable service may not include 'active *information services*' such as at-home shopping and banking that allows transactions between subscribers and cable operators or third parties."[278]

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and future effect designed to implement, interpret, or prescribe law or policy." (emphasis added)).

[246] *See*, *e.g.*, City Coalition Comments at 18-19; Free State Reply at 12-13; King County Comments at 11; NCTA Reply at 22-23.

[247] The City Coalition proposes that the parties should modify their franchises to comply with this Order via the franchise modification process set forth in section 625 of the Act. 47 U.S.C. § 545; City Coalition Comments at 19, n.89 ("the Second FNPRM could only be incorporated into existing agreements through a Section 545 proceeding."). Under those procedures, an LFA has 120 days to make a final decision about a cable operator's request to modify a franchise agreement. We do not adopt this framework, however, because as NCTA points out, the parties may not modify PEG requirements under section 625, and therefore cable operators and LFAs could not use that procedure to bring franchise agreements into compliance in every case. NCTA July 19 *Ex Parte* at 4. Therefore, we encourage the parties to negotiate franchise modifications within a reasonable time and find that 120 days should be, in most cases, a reasonable time for the adoption of franchise modifications.

[248] *See*, *e.g.*, City Coalition Comments at 18-19; City of Newton Apr. 17, 2019 *Ex Parte* at 9; AWC Apr. 3, 2019 *Ex Parte* at 5; Letter from Charlie Seelig, Town Administrator, Town of Halifax, MA, to Marlene H. Dortch, Secretary, FCC at 1 (July 22, 2019).

[249] *See* Letter from Katie McAuliffe Executive Director, Digital Liberty Federal Affairs Manager, Americans for Tax Reform, to Marlene H. Dortch, Secretary, FCC at Attachment at 8 (May 8, 2019) (stating that cable franchise agreements "typically have terms of about 10 to 15 years").

[250] *See supra* note 41. Indeed, the lawfulness of excluding costs associated with PEG/I-Nets from the franchise fee cap has been under Commission scrutiny for more than a decade (*see, e.g., 621 First R&O and FNRPM*, 22 FCC Rcd 5701, 5750-51, 5765, paras. 109, 110, 140 (2007)), and in 2008, the Sixth Circuit affirmed the Commission's determination as to new entrants that PEG related costs which do not qualify as capital costs are subject to the franchise fee cap. *See Alliance for Community Media v. FCC,* 529 F.3d 763, 583-86 (6th Cir. 2008). Therefore, we
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74. We find significant that the description of the term "information services" in the legislative history (*i.e.*, "services providing subscribers with the capacity to engage in transactions or to store, transfer, forward, manipulate, or otherwise process information or data [which] would not be cable services")[279] aligns closely with the 1996 Telecommunications Act's definition of "information service" codified in section 3(24) of the Act (*i.e.*, "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications").[280] We conclude, therefore, that for purposes of applying section 624(b), interpreting the term "information services" to have the meaning set forth in section 3(24) of the Act is most consistent with Congressional intent.[281] Because the Commission has determined that broadband Internet access service is an "information service" under section 3(24),[282] we likewise find that section 624(b)(1) precludes LFAs from regulating broadband Internet access provided via the cable systems of incumbent cable operators that are not common carriers. Moreover, even if the definition set forth in section 3(24) was not the intended definition of "information services" for purposes of section 624(b)(1), the highly analogous descriptions of this term in the legislative history of the 1984 Act also would apply to broadband Internet access service.[283] Thus, in either case, LFAs may not lawfully impose fees for the provision of information services (such as broadband Internet access) via a franchised cable system or require a franchise (or other authorization) for the provision of information services via such cable system.[284] We also clarify that LFAs and other state and local governmental units[285] cannot impose additional requirements on mixed-use "cable systems" in a manner inconsistent with this Order and the Act under the pretense that they are merely regulating facilities and equipment rather than information services.[286]

75. Although we recognize that a later provision, section 624(b)(2)(B), permits franchising authorities to enforce requirements for "broad categories of video programming or *other services*,"[287] when read together with the specific injunction against regulation of "information services" in section

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find Anne Arundel County's argument that this "decision represents [an] 'unexpected surprise'" to be unfounded. *See* Letter from Joseph Van Eaton *et al*,, Counsel to Anne Arundel County, *et al*. to Marlene H. Dortch, Secretary, FCC at 13 (July 24, 2019) (citing *Kisor v. Wilkie*, 139 S.Ct. 2400 (2019); *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515-16 (2009)).

[251] Take, for example, a franchise agreement that requires a cable operator to deliver free cable service to all municipal buildings and contribute a monetary payment of five percent of its gross revenues derived from the operation of its cable system to provide cable services. In that case, the LFA may wish to either (1) continue to receive the existing free cable service and a monetary payment of five percent minus the fair market value of that service, or (2) discontinue service and receive a monetary payment of five percent, or (3) reduce the free cable service to select municipal buildings and receive a monetary payment of the five percent minus the fair market value of the reduced service. However, what an LFA may not do is ask a cable operator to "voluntarily" waive the statutory cap by asking it to continue providing free cable service to all municipal buildings and contribute the five percent monetary payment, or request that a cable operator waive anything else under the statute as interpreted by the Commission. *See, e.g.*, Altice May 9, 2019 *Ex Parte* at 9 ("Some franchising authorities take advantage of periods in which they have maximum leverage to ask cable operators like Altice USA to 'voluntarily' waive the cap and accede to making payments or contributions that are not offset against the statutory limit on franchise fees. That pressure puts operators in a bind because, as a practical matter, they are often not in a position to resist franchising authority demands since the franchising authority exercises the sole domain over ROW access—which is one of the precise concerns that led to adoption of the Federal Cable Act in the first place."). *See also Amendment of Parts 1, 63, and 76 of the Commission's Rules to Implement the Provisions of the Cable Communications Policy Act of 1984*, Report and Order, 58 R.R.2d 1, 35, n.91 ("we note that neither a cable operator nor a franchising authority may waive mandatory sections of the Cable Act in reaching franchise agreements."). Accordingly, we reject the request of NATOA that we clarify that this Order "is permissive not mandatory." NATOA July 24, 2019 *Ex Parte* at 2. Complying with the terms of the statute is not optional.

[252] *Montgomery County*, 863 F.3d at 493.

[253] *Id*.

624(b)(1), we find that it would be unreasonable to construe section 624(b)(2)(B) as authorizing LFA regulation of information services when (b)(1) precludes franchising authorities from regulating such services.[288] As we noted in the *Second FNPRM*, the legislative history explains that section 624(b)(2)'s grant of authority "to enforce requirements . . . for broad categories of video programming or other services"[289] was intended merely to "assure[] the franchising authority that commitments made in an arms-length situation will be met," while protecting the cable operator from "being forced to provide specific programming or items of value which are not utilized in the operation of the cable system."[290] Reading these provisions together, it is apparent that Congress intended to permit LFAs to *enforce* franchise requirements governing "other services" under (b)(2), but only to the extent they are otherwise permitted to *establish* such requirements under (b)(1).[291] Because LFAs lack authority to regulate information services under section 624(b)(1), they may not lawfully enforce provisions of a franchise agreement permitting such regulation under section 624(b)(2), even if such provisions resulted from arms-length negotiations between the cable operator and LFA.[292] That is, the grant of authority to "enforce" certain requirements under section 624(b)(2)(B) does not give franchising authorities an independent right to impose requirements that they otherwise may not "establish" under section 624(b)(1).[293] We thus reject claims to the contrary.[294]

76. As discussed above, Congress in the 1984 Cable Act intended to preserve the *status quo* with respect to federal, state, and local jurisdiction over non-cable services, which lends further support to our conclusion that LFAs may not use their cable franchising authority to regulate information services provided over a cable system.[295] Because information services that are interstate historically have fallen outside the lawful regulatory purview of state and local authorities,[296] including LFAs, construing section 624(b) to bring those services within the scope of permissible LFA authority under Title VI would be fundamentally at odds with Congressional intent. For this reason, we reject City of Philadelphia *et al*.'s contention that our application of the mixed-use rule is barred by the Act because "[t]he 'regulatory and jurisdictional status quo' in 1984 . . . included [LFAs'] use of the franchise and franchise agreement to

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[254] *Second FNPRM,* 33 FCC Rcd at 8952, para. 26 (tentatively concluding that to the extent that any incumbent cable operators offer any telecommunications services, they can be regulated by LFAs only to the extent they provide cable service); *id*. paras. 27-28 (tentatively concluding that LFAs are prohibited from regulating the provision of broadband Internet access and other information services by incumbent cable operators that are not common carriers).

[255] *See infra* notes 271, 272.

[256] Specifically, the Commission historically has had jurisdiction over interstate telecommunications and information services. States have had jurisdiction over intrastate telecommunications services but not information services, which are jurisdictionally interstate. *See infra* note 272. We thus reject the City of Eugene's suggestion that maintaining the "status quo" supports broad state and local authority over non-cable services provided via cable systems. *See* City of Eugene July 24, 2019 *Ex Parte* at 5.

[257] "Non-cable" services offered by cable operators include telecommunications services and non-telecommunications services. *Second FNPRM*, 33 FCC Rcd at 8964-65, para. 25. Telecommunications services offered by cable operators include, for example, business data services, which enable dedicated point-to-point transmission of data at certain guaranteed speeds and service levels using high-capacity connections, and wireless telecommunications services. *Id*. Non-telecommunications services offered by cable operators include, but are not limited to, information services (such as broadband Internet access services), private carrier services (such as certain types of business data services), and Wi-Fi services. *Id*. Cable operators also may offer facilities-based interconnected Voice over Internet Protocol (VoIP) service, which the Commission has not classified as either a telecommunications service or an information service, but which is not a cable service. *Id*.

[258] Nothing in this Order is intended to limit LFAs' express authority under section 611(b) of the Act, 47 U.S.C. § 531(b), to require I-Net capacity. *But see supra* paras. 55-56 regarding franchise fee treatment of I-Nets.

[259] *First Report and Order*, 22 FCC Rcd at 5102, para. 1. The Sixth Circuit rejected challenges to the Commission's *First Report and Order*. *Alliance,* 529 F.3d 763.

regulate . . . cable systems that [Congress] recognized were carrying both cable services and non-cable communications services."[297] The statutory design as reflected in other provisions of Title VI reinforces our conclusion that LFAs are precluded under section 624(b)(1) from regulating non-cable services provided over the cable systems of incumbent cable operators that are not common carriers.[298] LFAs, therefore, may not lawfully regulate the non-cable services of such cable operators, including information services (such as broadband Internet access), private carrier services (such as certain types of business data services), and interconnected VoIP service.[299] For example, this precludes LFAs from not only requiring such a cable operator to pay fees or secure a franchise to provide broadband service via its franchised cable system, but also requiring it to meet prescribed service quality or performance standards for broadband service carried over that cable system.

77. We find unconvincing arguments that the statute compels a broader reading of LFAs' authority under Title VI to regulate cable operators' non-cable services, facilities, and equipment. Anne Arundel County *et al.* maintains, for example, that because section 624(a) grants LFAs authority to regulate a "cable operator," a term the Act defines as "[a] person . . . who provides cable service over a cable system,"[300] LFAs generally are authorized to regulate any of the services provided by a "cable operator" over a "cable system," including non-cable services.[301] Anne Arundel County *et al*. contends further that under section 624(b), LFAs "to the extent related to the establishment or operation of a cable system . . . may establish requirements for facilities and equipment"[302] and argues that the Act cannot be construed as limiting LFAs' jurisdiction to cable services since it permits LFAs to require, for example, build out and institutional networks.[303] We disagree with these arguments. Although, as Anne Arundel County *et al*. and others note,[304] the Act in certain circumstances permits LFAs to impose on cable operators certain requirements that are not strictly related to the provision of cable service,[305] such circumstances constitute limited exceptions to the general prohibition on LFA regulation of non-cable services contained in section 624.[306] They also do not override the specific prohibition on regulation of

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[260] *First Report and Order*, 22 FCC Rcd at 5153, paras. 121-22.

[261] *Second Report and Order*, 22 FCC Rcd at 19640-41, para. 17. The Commission adhered to that conclusion on reconsideration. *Order on Reconsideration*, 30 FCC Rcd at 816, para. 14.

[262] *Montgomery County*, 863 F.3d at 493 (finding that "on the record now before us, the FCC's extension of the mixed-use rule to incumbent cable providers that are not common carriers is arbitrary and capricious"). Our conclusion that the mixed-use rule applies to cable operators that are common carriers is based on our interpretation of sections 3(51) and 602(7)(C) of the Act. *Second FNPRM*, 33 FCC Rcd at 8965-66, para. 26. Under section 3(51) of the Act, a "provider of telecommunications services" is a "telecommunications carrier," which the statute directs "shall be treated as a common carrier under this Act only to the extent that it is engaged in providing telecommunications services." 47 U.S.C. § 153(51). Thus, to the extent that an incumbent cable operator provides telecommunications service, it would be treated as a common carrier subject to Title II of the Act with respect to its provision of such telecommunications service.

[263] *Second FNPRM*, 33 FCC Rcd at 8965-66, para. 26. NCTA asserts that many cable operators currently provide telecommunications services. NCTA Comments at 7, n.16.

[264] 47 U.S.C. § 522(7)(C).

[265] Anne Arundel County *et al*. Comments at 40-41 (asserting that under common carrier law, "it is the service which is the focus, not the facility. . . . [A] telecommunications service is defined 'regardless of the facilities used'. . . . Thus, a common carrier facility is subject to Title II only to the extent it is offering Title II services, and a facility owned by the cable operator could be used in the provision of Title II services . . . without being a common carrier facility").

[266] City of Philadelphia *et al*. Comments at 44-45. City of Philadelphia *et al*. asserts further that:

> The FCC . . . ignores the structure of the Communications Act by conflating communications *services*, cable and non-cable, with communications *systems*. Title II defines . . . 'common carriers' . . . in terms of the . . . 'telecommunications services' they provide, not in terms of the facilities they use to provide them. . . . Title VI, to the contrary, focuses on the facility, by

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information services set forth in section 624(b)(1). This interpretation accords with one of the 1984 Cable Act's principal purposes to "continue[] reliance on the local franchising process as the primary means of cable television regulation, while *defining and limiting the authority that a franchising authority may exercise through the franchise process*."[307]

78. We also conclude, contrary to the assertions of some commenters,[308] that it would conflict with Congress's goals in the Act to permit LFAs to treat incumbent cable operators that are not common carriers differently from incumbent cable operators and new entrants that are common carriers in their provision of information services, including broadband Internet access service.[309] As we noted in the *Second FNPRM*, incumbent and new entrant cable operators (whether or not they are also common carriers) often compete in the same markets and offer nearly identical services to consumers.[310] Thus, to allow LFAs to regulate the latter group of providers more strictly, such as by subjecting them to franchise and fee requirements for the provision of non-cable services,[311] could place them at a competitive disadvantage.[312] A report submitted by NCTA asserts, for example, that two fixed broadband providers may build out their networks differently, with one utilizing wireless backhaul and the other using landline backhaul, but "if one has inputs subjected to [fees] and the other does not, the differential . . . treatment can distort competition between the two, even when the services provided . . . are indistinguishable to the consumer."[313] The distortion to competition that stems from "hampering a subset of competitors,"[314] in turn, reduces the incentives of those competitors to invest in cable system upgrades for the provision of both cable and non-cable services, which could thwart the 1996 Act's goals to promote competition among communications providers and secure lower prices and higher quality services for consumers.[315] Such regulations, moreover, impede the Commission's development of a "consistent regulatory framework across all broadband platforms,"[316] which is "[o]ne of the cornerstones of [federal] broadband policy."[317]

79. We also are not convinced by arguments that interpreting the Act to bar LFAs from

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> defining a 'cable system' as a communications system that has particular characteristics . . . and that is 'designed to provide cable service which includes video programming.' The cable system is a cable system if it satisfies the defining characteristics of such a communications system, regardless of whether it is used for non-cable, non-Title VI services. LFA authority to regulate goes with the system. . . .

Id. at 46-47 (citations omitted).

[267] *Second FNPRM*, 33 FCC Rcd at 8965-66, para. 26.

[268] City of Philadelphia *et al*. Comments at 46-48, *citing* 1984 Cable Act House Report, H.R. Rep. No. 98-934 (1984), *as reprinted in* 1984 U.S.C.C.A.N. at 4659-60. In particular, City of Philadelphia *et al*. asserts that:

> Congress' stated reason for excepting Title II telephone and data transmission services from LFA regulation . . . was . . . to protect Title II telephone companies from unfair competition by cable operators. . . . Congress' fear was that cable operators could furnish the core services of Title II carriers . . . at lower cost because they were not subject to common carrier regulations, . . . forcing [telephone companies] to raise rates on telephone service to compensate for the lost business. . . . [T]he Title II exception was [intended] to achieve competitive equity between Title II telephone companies and cable operators.

Id. (citations omitted). *See also* 1984 Cable Act House Report, 1984 U.S.C.C.A.N. at 4664-66.

[269] *Id.* at 4665 (emphasis added).

[270] *Id*. at 4666.

[271] *See, e.g.*, *id*. at 4678 ("The Committee . . . intends that nothing in Title VI shall be construed to affect existing regulatory authority with respect to non-cable communications services provided over a cable system"); *id*. ("This legislation does not affect existing regulatory authority over the use of a cable system to provide non-cable communications services, such as private line transmission or voice communication, that compete with services provided by telephone companies."); *id*. at 4697 ("The Committee intends that state and federal authority over non-

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regulating non-cable facilities and equipment placed in public rights-of-way would pose a safety risk to the public because cable operators would have unfettered discretion to install non-cable facilities without review or approval by local authorities.[318] Section 636(a) of the Act specifically provides that "[n]othing in [Title VI] shall be construed to affect any authority of any State, political subdivision, or agency thereof, or franchising authority, regarding matters of public health, safety, and welfare, to the extent consistent with the express provisions of [Title VI]."[319] This provision, which is an express exception to Title VI's general prohibition on franchising authority regulation of non-cable facilities and equipment, thus permits LFAs to impose requirements on non-cable facilities and equipment designed to protect public safety, so long as such requirements otherwise are consistent with the provisions of Title VI.[320]

C. Preemption of Other Conflicting State and Local Regulation

80. As noted above, Title VI does not permit franchising authorities to extract fees or impose franchise or other requirements on cable operators insofar as they are providing services other than cable services. Ample record evidence shows, however, that some states and localities are purporting to assert authority to do so outside the limited scope of their authority under Title VI. These efforts appear to have followed the decision by the Supreme Court of Oregon in *City of Eugene v. Comcast,*[321] which upheld a local government's imposition of an additional seven percent "telecommunications" license fee on the provision of broadband services over a franchised cable system with mixed use facilities. To address this problem, we now expressly preempt any state or local requirement, whether or not imposed by a franchising authority, that would impose obligations on franchised cable operators beyond what Title VI allows.[322] Specifically, we preempt (1) any imposition of fees on a franchised cable operator or any affiliate using the same facilities franchised to the cable operator[323] that exceeds the formula set forth in section 622(b) of the Act and the rulings we adopt today, whether styled as a "franchise" fee, "right-of-access" fee, or a fee on non-cable (*e.g.*, telecommunications or broadband) services, and (2) any requirement that a cable operator with a Title VI franchise secure an additional franchise or other authorization to provide non-cable services via its cable system.[324] We base these conclusions on

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cable communications services under the status quo shall be unaffected by the provisions of Title VI. . . . This approach protects cable companies from unnecessary regulation, while reserving for state and federal officials the authority they need to address the issue of competition between telephone and cable companies. . . ."); *id*. at 4698 ("The Committee does not intend to address the question of regulatory jurisdiction over non-cable communications services provided over cable systems. . . . The intent of the Committee is not to address the jurisdictional question at all."); *id*. at 4700 ("It is the intent . . . that, with respect to non-cable communications services, both the power of any state public utility commission and the power of the FCC be unaffected by the provisions of Title VI. Thus, Title VI is neutral with respect to such authority.").

[272] This interpretation is reinforced by both the text of section 621(b)(3) of the Act and its legislative history (relating to the provision of telecommunications services by cable operators), which Congress added to Title VI through the Telecommunications Act of 1996:

> The intent of [section 621(b)(3)(A)] is to ensure that regulation of telecommunications services, which traditionally has been regulated at the Federal and State level, remains a Federal and State regulatory activity. The Committee is aware that *some [LFAs] have attempted to expand their authority over the provision of cable service to include telecommunications service offered by cable operators*. Since 1934, the regulation of interstate and foreign telecommunications services has been reserved to the Commission; the State regulatory agencies have regulated intrastate services. It is the Committee's intention that when an entity, whether a cable operator or some other entity, enters the telephone exchange service business, such entity should be subject to the appropriate regulations of Federal and State regulators.

1996 Act House Report, H.R. Rep. No. 104-204, 104th Cong., 1st Sess. 86, 93 (1995) (emphasis added). The fact that section 621(b)(3) seeks to protect *incumbent* cable operators from LFA regulation under Title VI when they provide certain non-cable services, *i.e.*, telecommunications services, further undermines LFAs' assertion that the common carrier exception in section 602(7)(C) was intended to shield from LFA regulation only the provision of (continued….)

Congress's express decision to preempt state and local laws that conflict with Title VI of the Communications Act (section 636(c)), the text and structure of Title VI and the Act as a whole, Congressional and Commission policies (including the policy of nonregulation of information services), and the Supremacy Clause of the U.S. Constitution.[325]

81. *Authority to Preempt*. Congress has the authority to preempt state law under Article VI of the U.S. Constitution. While Congress's intent to preempt sometimes needs to be discerned or implied from a purported conflict between federal and state law, here Congress spoke directly to its intent to preempt state and local requirements that are inconsistent with Title VI. This express preemption extends beyond the actions of any state or local franchising authority. Section 636(c) of the Act provides that "any provision of law of any State, political subdivision, or agency thereof, or franchising authority, or any provision of any franchise granted by such authority, which is inconsistent with this chapter shall be deemed to be preempted and superseded."[326] The reference in section 636(c) to "this chapter" means that Congress intended to preempt any state or local law (or any franchise provision) that is inconsistent with any provision of the Communications Act, whether or not codified in Title VI.[327] Moreover, section 636(c) applies broadly to "*any* [inconsistent] provision of law" of "*any State, political subdivision, or agency thereof*."[328] That means that Congress intended that states and localities could not "end-run" the Act's limitations by using other governmental entities or other sources of authority to accomplish indirectly what franchising authorities are prohibited from doing directly. [329]

82. Where Congress provides an express preemption provision such as section 636(c), the Commission has delegated authority to identify the scope of the subject matter expressly preempted and assess whether a state's law falls within that scope.[330] The Commission may, therefore, expressly bar states and localities from acting in a manner that is inconsistent with both the Act and the Commission's interpretations of the Act, so long as those interpretations are valid.[331] We therefore disagree with assertions that the Commission lacks authority to preempt non-cable regulations imposed by states and localities pursuant to non-Title VI sources of legal authority.[332]

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non-cable services by *new entrants*.

[273] *Second Report and Order*, 22 FCC Rcd at 19640, para. 17; *Montgomery County*, 863 F.3d at 493. *See also Second FNPRM*, 33 FCC Rcd at 8965-66, para. 26 (tentatively concluding that the mixed-use rule "prohibits LFAs from regulating the provision of any services other than cable services offered over the cable systems of incumbent cable operators that are common carriers, or from regulating any facilities and equipment used in the provision of any services other than cable services offered over the cable systems of incumbent cable operators that are common carriers. . . ."). Certain LFA advocates appear to concede that the Act precludes LFAs from regulating under Title VI a cable operator's provision of telecommunications services via its cable system. *See, e.g.*, NATOA *et al*. Comments at 16-17 (stating that the definition of cable system "establishes that Title VI does not authorize LFAs to regulate the telecommunications services provided over what is otherwise a cable system"); Anne Arundel County *et al*. Comments at 37-38 (recognizing that various provisions in section 621 preclude LFA regulation of telecommunications services by cable operators, but stating that "[a]s long as a local government possesses authority to regulate telecommunications from a source other than Title VI franchise authority, none of these provisions prohibit it"). *See also Montgomery County*, 863 F.3d at 492 ("The Local Regulators admit that the FCC's mixed-use decision is 'defensible as applied to Title II carriers,' since the Act expressly states that [LFAs] may regulate Title II carriers only to the extent they provide cable services.").

[274] *Second FNPRM*, 33 FCC Rcd at 8966-67, para. 27.

[275] 47 U.S.C. § 544(a) (emphasis added).

[276] *Id*. § 544(b)(1) (emphasis added). While the preamble to section 624(b) specifically limits the provision to franchises "granted after the effective date of this title" and therefore appears to grandfather local regulation of information services that may have occurred prior to 1984, when Title VI took effect, we note that very few franchises in effect today were granted prior to that year.

[277] 1984 Cable Act House Report, 1984 U.S.C.C.A.N. at 4679.

83. *Scope of Preemption.* The Commission's task, then, in interpreting the scope of preemption under section 636(c) is to determine whether specific state or local requirements are inconsistent with Title VI or other provisions in the Communications Act. Looking at the provisions of Title VI and the Act as a whole, we have little trouble concluding that Congress did not intend to permit states, municipalities, or franchising authorities to impose fees or other requirements on cable operators beyond those specified under Title VI, under the guise of regulating "non-cable services" or otherwise restricting a cable operator's construction, operation, or management of facilities in the rights-of-way.

84. As an initial matter, we note that Title VI establishes a framework that reflects the basic terms of a bargain—a cable operator may apply for and obtain a franchise to access and operate facilities in the local rights-of-way, and in exchange, a franchising authority may impose fees and other requirements as set forth and circumscribed in the Act. So long as the cable operator pays its fees and complies with the other terms of its franchise, it has a license to operate and manage its cable system free from the specter of compliance with any new, additional, or unspecified conditions (by franchise or otherwise) for its use of the same rights-of-way.

85. The substantive provisions of Title VI make the terms of this bargain clear. For starters, section 621(a)(1) provides franchising authorities with the right to grant franchises, and section 621(a)(2) explains that such franchises "shall be construed to authorize the construction of a cable system over public rights-of-way . . ."[333] A "cable operator," in turn, may not provide "cable service" unless the cable operator has obtained such a franchise.[334] Other provisions make clear that a franchise does not merely authorize the construction of a cable system, but also the "management and operation of such a cable system,[335] including the installation of Wi-Fi and small cell antennas attached to the cable system."[336]

86. The right to construct, manage, and operate a "cable system" does not mean merely the right to provide cable service.[337] Numerous provisions in Title VI evidence Congress's knowledge and understanding that cable systems would carry non-cable services—including telecommunications and

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[278] *Id.* (emphasis added). *See also id.* at 4681 ("Some examples of non-cable services would be: shop-at-home and bank-at-home services, electronic mail, one-way and two-way transmission of non-video data and information not offered to all subscribers, data processing, video-conferencing, and all voice communications."); *id*. ("Many commercial *information services* today offer a package of services, some of which (such as news services and stock listings) would be cable services and some of which (such as electronic mail and data processing) would not be cable services. . . . [T]he combined offering of a non-cable shop-at-home service with service that by itself met all the conditions for being a cable service would not transform the shop-at-home service into a cable service, or transform the cable service into a non-cable communications service.") (emphasis added).

[279] *Id.* at 4679.

[280] 47 U.S.C. § 153(24).

[281] *Second FNPRM*, 33 FCC Rcd at 8966-67, para. 27. The fact that the "information services" definition in section 3(24) of the Act was enacted as part of the 1996 Act – more than ten years after Congress passed section 624(b) – supports our conclusion that LFAs lack authority under section 624(b)(1) to regulate information services. The absence in Title VI of specific references to the section 3(24) definition of "information service" suggests only that Congress, in passing the 1996 Act, did not wish to re-open the 1984 Cable Act; it does not indicate that Congress intended to grant LFAs general authority to regulate information services.

[282] The Commission in 2018 reinstated the "information service" classification of broadband Internet access service. *Restoring Internet Freedom Order*, WC Docket No. 17-108, Declaratory Ruling, Report and Order, and Order, 33 FCC Rcd at 320-321, paras. 26-29 (2018) (*Restoring Internet Freedom Order*).

[283] 1984 Cable Act House Report, 1984 U.S.C.C.A.N. at 4680-81.

[284] Application of the mixed-use rule to broadband Internet access service is not tied to the Commission's classification of broadband as an information service. Under the Commission's prior conclusion in 2015 that broadband Internet access service is a Title II telecommunications service, the mixed-use rule would apply based on the provisions of Title VI for the reasons explained above in paragraphs 66-71.

information services. The definition of "cable system," for example, anticipates that some facilities may carry both telecommunications and cable services.[338] With respect to information services, section 601 of the Act provides that one of Title VI's purposes is to "assure that cable communications provide and are encouraged to provide the widest possible diversity of information sources and services to the public."[339] And, as we have already seen, Congress expressly provided in section 624(b) for "mixed-use" facilities that carry both cable services and "video programming or other information services."[340]

87. The legislative history reinforces the conclusion that Congress understood that a franchised "cable system" would carry both cable and non-cable services. The House Report, for example, explains that "[t]he term 'cable system' is not limited to a facility that provides only cable service which includes video programming. Quite the contrary, many cable systems provide a wide variety of cable services and other communications services as well. A facility would be a cable system if it were designed to include the provision of cable services (including video programming) along with communications services other than cable service."[341]

88. The point is that Congress was well aware that "cable systems" would be used to carry a variety of cable and non-cable services. It follows that Congress could have, if it wanted, provided significant leeway for states, localities, and franchising authorities to tax or provide other regulatory restrictions on a cable system's provision of non-cable services in exchange for the cable operator receiving access to the rights-of-way. But as it turns out, the balance of Title VI makes clear that Congress sharply circumscribed the authority of state or local governments to regulate the terms of this exchange. Today, we make clear that, under section 636(c), states, localities, and franchising authorities may not impose fees or restrictions on cable operators for the provision of non-cable services in connection with access to such rights-of-way, except as expressly authorized in the Act. We provide

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[285] *See infra* section III.C.

[286] For this reason, we reject assertions that section 624's grant of authority to "establish" and "enforce" certain requirements for facilities and equipment would permit LFAs to bypass the statutory prohibition on regulation of information services. *See, e.g.*, Anne Arundel County *et al.* July 24, 2019 *Ex Parte* at 9.

[287] 47 U.S.C. § 544(b)(2)(B) (emphasis added).

[288] *Second FNPRM*, 33 FCC Rcd at 8967-68, para. 28. We note further that the limitation on the ability of franchising authorities to establish requirements under section 624(b)(1) extends specifically to "information services," whereas the authority granted to franchising authorities in section 624(b)(2) makes no mention of "information services." *Id.* n.135.

[289] 47 U.S.C. § 544(b)(2)(B).

[290] *Second FNPRM*, 33 FCC Rcd at 8967-68, para. 28, n. 135, *citing* 1984 Cable Act House Report, 1984 U.S.C.C.A.N. at 4706.

[291] Although the legislative history provides examples of "broad categories of video programming," *id*. at 4705-06 (stating that the franchising authority may enforce provisions for children's programming, news and public affairs programming, sports programming and other broad categories of programming), it does not specify what services are encompassed within the phrase "other services" for purposes of applying section 624(b)(2)(B). Although the phrase "other services" is ambiguous, it would be unreasonable to conclude that Congress intended for it to include services, such as information services, that franchising authorities are not empowered to regulate under section 624. Rather, we find it more reasonable to construe the phrase as referring to services that franchising authorities lawfully could require under Title VI, such as the provision of PEG channels and I-Net capacity. We, therefore, reject Anne Arundel County *et al.*'s assertion that the term "other service" in section 624(b)(2)(B) includes information services. Anne Arundel County *et al*. Comments at 38-39, n. 111.

[292] We thus disagree with City Coalition's contention that "[i]f . . . a cable operator agrees to undertake obligations regarding information services though arms-length negotiation – be they obligations regarding facilities that are not part of the cable system or obligations regarding noncable services – then a LFA may enforce those obligations." City Coalition Comments at 22.

further explanation in two critical areas to clarify that these categories of state and local restrictions are preempted: (a) additional franchise fees beyond those authorized in Section 622 and (b) additional franchises or regulatory restrictions on a cable operator's construction, management, or operation of a cable system in the rights-of-way.

89. *Additional fees.* Both Congress and the Commission have recognized that the franchise fee is the core consideration that franchising authorities receive in exchange for the cable operator's right to access and use the rights-of-way.[342] As explained in detail above, Congress carefully circumscribed how this fee should be calculated: It provided that "the franchise fees paid by a cable operator with respect to any cable system shall not exceed 5 percent of such cable operator's gross revenues derived in such period from the operation of the cable system *to provide cable services*".[343] We must assume that Congress's careful choice of words was intentional. While the fee would apply to the "cable operator" with respect to any "cable system," it would only apply to revenue obtained from "cable services," *not* non-cable services that Congress understood could provide additional sources of revenue.

90. We find additional support for this conclusion in Congress's broad definition of the term "franchise fee," which covers "any tax, fee, or assessment of any kind imposed by a franchising authority or other governmental entity on a cable operator or cable subscriber or both, solely because of their status as such."[344] This broad definition was intended to limit the imposition of any tax, fee, or assessment of any kind—including fees purportedly for provision of non-cable services or for, access to, use of, or the value of the rights of way[345]—to five percent of the cable operator's revenue from cable services.[346] And its language reinforces the text of section 636(c) by making clear that a different state or local "governmental entity" cannot end-run the cap by imposing fees for access to any public right of way within the franchise area or in instances of overlapping jurisdiction.[347]

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[293] NCTA Reply at 28 ("Although . . . Section 624(b) discusses [the prohibition on LFA regulation of information services] in the context of cable franchise proposals and renewals, the prohibition would lose all practical meaning if franchising authorities were able to circumvent it simply by waiting to impose . . . requirements on non-cable services until after cable franchise negotiations concluded. . . .").

[294] Anne Arundel County *et al.* July 24, 2019 *Ex Parte* at 8-9.

[295] 1984 Cable Act House Report, 1984 U.S.C.C.A.N. at 4666.

[296] *Id.* at 4700 ("The FCC [under section 621(d)(1)] may require a cable operator to file informational tariffs for enhanced services which are under the FCC's jurisdiction when offered by common carriers. . . . States would not have the authority to require cable operators to file [such] tariffs for . . . enhanced services . . . which are interstate in character. . . ."). The Commission has determined that the term "information service" has essentially the same meaning as the term "enhanced service" for purposes of applying the Act. *See, e.g.*, *Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, As Amended,* CC Docket No. 96-149, 11 FCC Rcd 21905, 21955, para. 102 (1996); *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501, 11511, para. 21 (1998). *See also* 1996 Act Conference Report, S. Rep. 104-230 at 18 (Feb. 1, 1996) (stating that the 1996 Act "defines 'information service' similar to the FCC definition of 'enhanced services'"); *NCTA v. Brand X Internet Svcs.*, 545 U.S. 967, 992-994 (2005). Moreover, even assuming that LFAs at the time Congress passed the 1984 Cable Act used their cable franchising authority to regulate non-cable services as City of Philadelphia *et al*. asserts, the provisions of section 624 plainly evidence Congressional intent to treat pre- and post-Act cable franchises differently. *Compare* 47 U.S.C. § 544(b) (authorizing franchising authorities, in the case of franchises granted after the effective date of Title VI, to take certain actions "*to the extent related to* the establishment or operation of the cable system") (emphasis added) *with* (continued….)

91. In reaching this conclusion, we read the phrase "solely because of their status as such" as protective language intended to place a ceiling on any sort of fee that a franchising authority might impose on a cable operator *qua* cable operator or *qua* franchisee—that is, any fee assessed in exchange for the right to construct, manage, or operate a cable system in the rights-of-way. We therefore reject the claim of some commenters that this language permits localities to charge additional fees so long as the cable operator also acts as a telecommunications provider or Internet service provider, or so long as the state or locality can articulate some non-cable related rationale for its actions.[348] This alternate rationale flies in the face of statutory text. As noted above, a "cable operator" is defined not only as a person or entity that provides cable service, but also one that "controls or is responsible for, through any arrangement, the *management and operation* of such a cable system."[349] The management or operation of a cable system includes the maintenance of the system to provide non-cable services—which Congress understood would be supplied over the same cable facilities.[350] Because a fee that a state or locality imposes on a cable operator's provision of non-cable services relates to the "manage[ment] and operat[ion]" of its cable system, such fee is imposed on the cable operator "solely because of [its] status" as a cable operator and is capped by section 622.[351]

92. The structure of section 622 as a whole provides further support for our reading. The language "solely because of their status as such" operates to distinguish fees imposed on cable operators for access to the rights-of-way ("franchise fees"), which are capped, from "any tax, fee, or assessment of general applicability," which are not.[352] Section 622 thus envisions two mutually exclusive categories of assessments—(1) fees imposed on cable operators for access to the rights-of-way in their capacity as franchisees (that is, "solely because of their status as such") and (2) broad-based taxes. Understood in this manner, any assessment on a cable operator for constructing, managing, or operating its cable system in the rights-of-way is subject to the five-percent cap—even if other non-cable service providers (*e.g.*, telecommunications or broadband providers) are subject to the same or similar access fees.[353] This is because the definition of "franchise fee" in section 622(g)(1) centers on *why* the fee is imposed on a cable

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47 U.S.C. § 544(c) (authorizing franchising authorities, in the case of franchises effective under prior law, to enforce requirements for the provision of services, facilities, and equipment "*whether or not related to* the establishment or operation of the cable system") (emphasis added).

[297] City of Philadelphia *et al*. Comments at 50-51.

[298] *See, e.g.*, 47 U.S.C. § 542(b) (limiting the franchise fees that a franchising authority may assess on a cable operator to "[five] percent of such cable operator's gross revenues derived . . . from the operation of the cable system *to provide cable services*") (emphasis added); *id.* § 541(b)(3)(B) (barring a franchising authority from "impos[ing] any requirement [under Title VI] that has the purpose or effect of prohibiting, limiting, restricting, or conditioning the provision of a telecommunications service by a cable operator"); *id*. § 541(b)(3)(D) (barring a franchising authority from "requir[ing] a cable operator to provide any telecommunications services or facilities" as a condition of the grant or renewal of a franchise, with certain exceptions). We discuss section 622(b) of the Act, *id*. § 542(b), in greater detail in section C.

[299] Although interconnected VoIP service has not been classified by the Commission, LFA regulation of this service is prohibited under the mixed-use rule, as clarified in this Order, regardless of whether it is deemed a telecommunications service or an information service.

[300] *Id.* § 522(5)(A).

[301] *See, e.g.*, Anne Arundel County *et al*. Comments at 37, n. 105. Insofar as Anne Arundel County *et al*. is arguing that "once a cable operator, always a cable operator," and "once a cable system, always a cable system," *i.e.*, that when a cable operator deploys facilities, those facilities remain part of a cable system even when used to provide non-cable services, we disagree with that assertion. Consistent with our interpretation of section 602(7)(C) above, we find that a more reasonable reading of the statute is that the nature of facilities (*i.e.*, "cable system" or not) depends on how the facilities are used, not on whether the provider offered cable service at the time the facilities were deployed.

[302] Anne Arundel County *et al*. Comments at 37.

operator, *i.e.*, "solely because of [its] status" as a franchisee, and not *to whom* the fee is imposed, *i.e.*, "solely applicable" to a cable operator.[354] The entire category of "franchise fees" is subject to the five-percent cap, in distinction to generally-applicable taxes whose validity must be shown, at least in part, by their application to broader classes of entities or citizens beyond providers of cable and non-cable communications services.[355]

93. The legislative history and purposes of the 1984 Cable Act support this broad and exclusive interpretation of the term "franchise fees." It reveals, for example, that Congress initially established the section 622(b) cap on franchise fees out of concern that local authorities could use such fees as a revenue-raising mechanism.[356] A reading of section 622 that would permit states and localities to circumvent the five percent cap by imposing unbounded fees on "non-cable services" would frustrate the Congressional purpose behind the cap and effectively render it meaningless. The legislative history behind the 1996 amendments to section 622(b) make this intent explicit. Prior to 1996, section 622 provided, in relevant part, that "the franchise fees paid by a cable operator with respect to any cable system shall not exceed [five percent] of such cable operator's gross revenues derived . . . from *the operation of the cable system*."[357] The House Report accompanying the 1996 amendment,[358] which explained the addition of the key limitation "for the provision of cable services" in section 622(b), provides that:

> Franchising authorities may collect franchise fees under [section 622 of the Act] solely on the basis of the revenues derived by an operator *from the provision of cable service*. . . . This section does not restrict the right of franchising authorities to collect franchise fees on revenues from cable services and cable-related services, such as, but not limited to, revenue from the installation of cable service, equipment used to receive cable service, advertising over video channels, compensation received from video programmers, and other sources related to the provision of cable service over the cable system.[359]

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[303] *Id*. *See also* Anne Arundel County *et al*. July 24, 2019 *Ex Parte* at 9, n.26 (noting that section 632(a) of the Act, 47 U.S.C. § 552(a), permits franchising authorities to establish and enforce "construction schedules and other construction-related performance requirements, of the cable operator").

[304] *See, e.g.*, *id*.; City Coalition Comments at 21-22; City of New York Comments at 11-12.

[305] *See, e.g.*, 47 U.S.C. § 531(b), (f) (permitting franchising authorities, among other things, to require channel capacity on institutional networks); *id*. § 551(g) (providing that "[n]othing in [Title VI] shall be construed to prohibit any State or any franchising authority from enacting or enforcing laws consistent with this section for the protection of subscriber privacy").

[306] *See id.* § 544(a) ("[A] franchising authority *may not regulate* the services, facilities, and equipment provided by a cable operator *except to the extent consistent with this subchapter*. . . .") (emphasis added); *id.* § 541(b)(3)(D) ("[A] franchising authority *may not require* a cable operator to provide any telecommunications service or facilities, *other than institutional networks*, as a condition of the initial grant of a franchise, a franchise renewal, or transfer of a franchise.") (emphasis added). *See also id.* § 541(b)(3)(A)-(C). NATOA *et al*. agree that the grant to LFAs of authority to require I-Nets is an exception from the general injunction in section 621(b)(3)(D) against requiring cable operators to provide telecommunications services or facilities. NATOA *et al*. Comments at 18, n.52. NATOA *et al*. also appear to concede that section 624(b) precludes LFAs from regulating under Title VI information services provided over cable systems. *Id.* at 18, n.53 ("To the extent [the Commission's conclusion] is . . . that Title VI does not grant LFAs authority over the information services provided over cable systems (other than as expressly provided in the Act. . .) . . . we agree that Title VI does not expressly grant such authority. . . .").

[307] 1984 Cable Act House Report, 1984 U.S.C.C.A.N. at 4656 (emphasis added).

[308] *See, e.g.*, NATOA *et al*. Comments at 20-21.

[309] *Second FNPRM*, 33 FCC Rcd at 8969, para. 30.

94. If, as CAPA asserts, Congress had intended the term "cable operator" as used in section 622(b) to refer to an entity only to the extent such entity provides cable service, there would have been no need for Congress to amend section 622(b) in this manner.[360]

95. Although, as LFA advocates note,[361] section 621(d)(2) of the Act provides that "[n]othing in [Title VI] shall be construed to affect the authority of any State to regulate any cable operator to the extent that such operator provides any communication service other than cable service, whether offered on a common carrier or private contract basis,"[362] this provision is not an affirmative grant to states of authority to regulate non-cable services that they historically have not been empowered to regulate. First, the term "State" in section 621(d) does not extend to LFAs; it is defined by reference to section 3 of the Communications Act. The legislative history makes clear that this was a reference to the division of regulatory authority between the "state public utility commission and … the FCC."[363] Second, this provision merely reflects Congress's intent in the 1984 Cable Act to preserve the *status quo* with respect to federal and state jurisdiction over non-cable services.[364] As noted, under the then-existing *status quo*, the Commission had jurisdiction to regulate interstate services; states had jurisdiction to regulate intrastate services.[365] Because the Commission historically has concluded that information service is jurisdictionally interstate,[366] it traditionally has fallen outside the proper regulatory sphere of state and local authorities.[367] Moreover, the Commission has long recognized the impossibility of separately regulating interstate and intrastate information services.[368] Thus, neither a state nor its political subdivisions may lawfully regulate such service under section 621(d)(2) by requiring a cable operator with a Title VI franchise to pay a fee or secure a franchise or other authorization to provide broadband Internet access service over its cable system. To conclude otherwise would contravene Congress's intent in Title VI to maintain the jurisdictional *status quo* with respect to federal, state, and local regulation of non-cable services.[369]

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[310] *Id*.

[311] In section III.C., we discuss franchise and fee requirements imposed by state and local governments, including LFAs, on franchised cable operators' provision of non-cable services. We find that such requirements are preempted under section 636(c) of the Act.

[312] As NCTA notes, under the *First Report and Order*, LFAs may not lawfully require a telecommunications carrier with a preexisting right to access public rights-of-way for the provision of telecommunications services, to secure a Title VI franchise to provide non-cable services over its network. We agree with NCTA that a cable operator with a preexisting right to access public rights-of-way for the provision of cable service likewise should not be required to obtain a separate authorization to provide non-cable services over its cable system, given that there is no incremental burden on the rights-of-way. NCTA May 3, 2019 *Ex Parte* at 6.

[313] NCTA Reply App. 1, Report of Jonathan Orszag and Allan Shampine at 11 (Orszag/Shampine Analysis).

[314] *Id*.

[315] *Second FNPRM*, 33 FCC Rcd at 8969, para. 30. *See also* Orszag/Shampine Analysis at 6 (estimating that even modest reductions in network improvements as a consequence of reduced incentives to invest easily could result in consumer welfare losses exceeding $40 billion by 2023); ICLE July 18, 2019 *Ex Parte* at 19 ("[T]here is little economic sense in arbitrarily distinguishing between new entrants and incumbents. If the taxation of new broadband entrants under cable franchising rules would decrease their incentive to deploy, then the taxation of incumbent cable providers offering broadband services would similarly decrease their incentive to expand, upgrade, or make other broadband network investments."). We find no record basis for concluding that these concerns are raised only with respect to incumbent cable operators, and not new entrants. *Second FNPRM*, 33 FCC Rcd at 8969, para. 30, n.145 (seeking comment on whether concerns regarding regulatory disparity apply to new entrants that are not common
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96. We find unpersuasive NATOA *et al*.'s selective reading of the legislative history to conclude that Congress intended to permit states and localities to require franchised cable operators to pay additional rights-of-way fees for the provision of non-cable services. NATOA *et al*. note that the House Conference Report accompanying the 1996 amendment stated that "to the extent permissible under state and local law, communications services, including those provided by a cable company, shall be subject to the authority of a local government to, in a nondiscriminatory and competitively neutral way, manage its public rights-of-way and charge fair and reasonable fees."[370] Although the cited legislative history is relevant to our interpretation of the statute,[371] we do not read this language so broadly as permitting states and localities to charge redundant or duplicative fees on cable franchisees that are subject to the five-percent cap—a reading that would, as we have explained, eviscerate the cap entirely. Rather, we conclude that, under section 636(c), and taking into account the provisions of Title VI as a whole, any fees that exceed the five-percent cap, as formulated in section 622, are not "fair and reasonable."[372]

97. Consistent with Congress's intent, as early as 2002, the Commission has construed section 622(b) to permit franchising authorities to include in the revenue base for franchise fee calculations only those revenues derived from the provision of cable service.[373] Thus, if a cable operator generates additional revenue by providing non-cable services over its cable system, such additional revenue may not be included in the gross revenues for purposes of calculating the cable franchise fee.[374]

98. As courts have recognized, the Commission is charged with "the ultimate responsibility for ensuring a 'national policy' with respect to franchise fees."[375] We exercise that authority today by making clear that states, localities, and cable franchising authorities are preempted from charging franchised cable operators more than five percent of their gross revenue from cable services. This cap applies to any attempt to impose a "tax, fee, or assessment of any kind" that is not subject to one of the

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carriers).

[316] *Communications Assistance for Law Enforcement Act and Broadband Access and Services*, ET Docket No. 04-295, First Report and Order and Further Notice of Proposed Rulemaking, 20 FCC Rcd 14989, para. 33 (2005).

[317] *Id. See also Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities*, CC Docket No. 02-33, Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 14852, paras. 1, 17 (2005) (recognizing the benefits of "crafting an analytical framework that is consistent, to the extent possible, across multiple platforms that support competing services," and thus adopting a framework that "regulat[es] like services in a similar functional manner."). The fact that section 602(7)(C) excludes from the term "cable system" a facility of a common carrier subject to Title II of the Act, 47 U.S.C. § 522(7)(C), does not persuade us that Congress intended to permit LFAs to regulate incumbent cable operators that are not common carriers differently from incumbent cable operators and new entrants that are common carriers in their provision of non-cable services. Rather, given Congress's desire in the Act to ensure "competitively neutral and nondiscriminatory" regulation, *see, e.g.*, 47 U.S.C. § 253(c), we find that section 602(7)(C)'s carve out of Title II facilities from the definition of "cable system" merely evinces Congressional intent to preclude franchising authorities from regulating any telecommunications services carried over a cable system.

[318] *See, e.g.*, City Coalition Comments at 24-25; City of Philadelphia *et al*. Comments at 44; King County Comments at 9-10; City of Lakewood Comments at 2; Massachusetts Municipal Association Comments at 2.

[319] 47 U.S.C. § 556(a).

[320] *See* NCTA Mar. 13, 2019 *Ex Parte* at 11 (asserting that the mixed-use rule would not "authorize cable operators to place new installations in public [rights-of-way] without limit" or prevent a locality from addressing "legitimate public safety and welfare issues, such as road closures and traffic management during installation and maintenance of cable plant and enforcement of building and electrical codes").

[321] *City of Eugene v. Comcast of Or. II, Inc.,* 375 P.3d 446 (Or. 2016) (*Eugene*).

[322] Such preemption applies to the imposition of duplicative taxes, fees, assessments, or other requirements on affiliates of the cable operator that utilize the cable system to provide non-cable services. NCTA July 18, 2019 *Ex Parte* at 5.

enumerated exemptions in section 622(g)(2) on a cable operator's non-cable services or its ability to construct, manage, or operate its cable system in the rights-of-way.

99. *Additional Franchises or Other Requirements.* Congress also made clear that states, localities, and franchising authorities lack authority to require additional franchises or place additional nonmonetary conditions on a cable operator's provision of non-cable services that are not expressly authorized in the Act. Several provisions state explicitly that franchising authorities may not regulate franchised "cable systems" to the extent that they provide telecommunications services.[376] In addition, as we noted above, section 624(b)(1) precludes franchising authorities from "establish[ing] requirements for video programming or other information services."[377] In the mixed-use rule we adopt today, we reasonably construed this provision to prohibit LFAs from regulating information services provided over cable systems.[378]

100. As noted above, section 636(c) operates to preempt state and local requirements that would use non-Title VI authority to accomplish indirectly what franchising authorities are prohibited from doing directly. Consistent with this reasoning, we conclude that any state or local law or legal requirement that obligates a cable operator franchised under Title VI to obtain a separate, additional franchise (or other authorization) or imposes requirements beyond those permitted by Title VI to provide cable or non-cable services, including telecommunications and information services, over its cable system conflicts with the Act and thus also is expressly preempted by section 636(c). The mixed-use rule we adopt today represents a reasonable interpretation of the relevant provisions of Title VI as well as a balanced accommodation of the various policy interests that Congress entrusted to the Commission; therefore, it too has preemptive effect under section 636(c).[379]

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[323] For example, a cable operator may provide voice or broadband services through affiliates, and an LFA could not impose duplicative fees on those affiliates.

[324] We do not set forth an exhaustive list of state and local laws and legal requirements that are deemed expressly preempted. Rather, we simply clarify that state and local laws and other legal requirements are preempted to the extent that they conflict with the Act and the Commission's implementing rules and policies. As discussed in paragraph 105 below, such preempted requirements include those expressly approved in *Eugene*.

[325] Contrary to some assertions in the record, we find that the *Second FNPRM* provided adequate notice to interested parties that the Commission could exercise its preemption authority under section 636(c) to address local regulation of non-cable services outside Title VI. *See, e.g.*, NATOA *et al.* July 24, 2019 *Ex Parte* at 10, City of Eugene July 24, 2019 *Ex Parte* at 2-4. In support of its tentative conclusion that "[s]ection 624(b) of the Act prohibits LFAs from using their franchising authority to regulate the provision of information services, including broadband Internet access service," the *Second FNPRM* specifically cited section 636(c) and set forth the text of that provision nearly verbatim. *Second FNPRM*, 33 FCC Rcd at 8966-67, para. 27, n. 126. In addition, the Commission in the *Second FNPRM* tentatively concluded that preempted "entry and exit restrictions" include requirements that an incumbent cable operator obtain a franchise to provide broadband Internet access service and that LFAs therefore are expressly preempted from imposing such requirements. *Id.* at 8968, para. 29. The Commission sought comment on that tentative conclusion and on "whether there are other regulations imposed by LFAs on incumbent cable operators' provision of broadband Internet access service that should be considered entry and exit restrictions, or other types of economic or public utility-type regulations, preempted by the Commission." *Id.* Such regulations include duplicative fee and franchise requirements imposed by franchising authorities such as the City of Eugene, which is a "governmental entity empowered by . . . [s]tate [] or local law to grant a [cable franchise]." 47 U.S.C. § 522(10). Indeed, the fact that multiple LFA advocates recognized that the *Second FNPRM* could be read to seek comment on the Commission's authority to preempt requirements imposed outside Title VI contradicts claims that the *Second FNPRM* did not adequately apprise parties of the possible scope of the Commission's preemption ruling. *See, e.g.,* CAPA Comments at 17; City Coalition Comments at 21-22; NATOA *et al.* Comments at 13-15; Free Press Reply at 7-8. Moreover, the fact that cable commenters in this proceeding referenced section 636(c) as a potential basis for our preemption ruling, *see, e.g.,* ACA Comments at 14; NCTA Comments at 36; ACA Reply at 5, demonstrates that such ruling is a "logical outgrowth" of the *Second FNPRM*. *Covad Communications Co. v. FCC*, 450 F.3d at 528, 548 (D.C. Cir. 2006), *citing Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 548-49 (D.C. Cir.

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101. *Public Policy.* Apart from our analysis of the text and structure of the Act and our longstanding delegated authority to preempt state regulations that are inconsistent with the Act, our preemption decisions today are also consistent with Congress's and the Commission's public policy goals and an appropriate response to problems that are apparent in the record.

102. Recognizing that excessive regulation at the local level could limit the potential of cable systems to deliver a broad array of services, Congress expressed its intent to "minimize unnecessary regulation that would impose an undue economic burden on cable systems"[380] and "assure that cable communications provide and are encouraged to provide the widest possible diversity of information sources and services to the public."[381] More generally, section 230(b) of the Act expresses Congress's intent "to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation."[382] Accordingly, the Commission has previously preempted state and local regulations that would conflict with this federal policy of nonregulation of information services.[383] These longstanding federal policies provide further support for our decision today to read Title VI as prohibiting states, localities, and franchising authorities from imposing fees and obligations on cable operators beyond those expressly set forth in that Title.

103. Our preemption decision today will advance these federal policies by preventing further abuses of state and local authorities of the kind manifested in the record in this proceeding. In recent years, governmental entities at the local level increasingly have sought to regulate non-cable services provided over mixed-use cable systems franchised under Title VI, particularly broadband Internet access service.[384] Such governmental entities have included not only state and local franchising authorities acting pursuant to the cable franchising provisions of Title VI, but also state and local entities purportedly acting pursuant to their police powers to regulate public rights-of-way or other powers derived from

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1983) ("Whether the 'logical outgrowth' test is satisfied depends on whether the affected party 'should have anticipated' the agency's final course in light of the initial notice.").

[326] 47 U.S.C. § 556(c). For purposes of this provision, the term "State" has the meaning given such term in section 3 of the Act. *Id.* Section 3, in turn, provides that "the term 'State' includes the District of Columbia and the Territories and possessions." *Id*. § 153(47).

[327] *Id*. § 556(c). Section 636(c)'s reference to "this chapter" is to the Communications Act of 1934, as amended, which is codified in Chapter 5 of Title 47 of the United States Code. Section 636(c)'s reference to "this chapter" stands in contrast to other provisions in section 636, which reference "this subchapter," or Title VI of the Act. *Compare* 47 U.S.C. § 556(c) *with id.* § 556(a), (b).

[328] *Id.* § 556(c) (emphasis added). Contrary to some LFAs' assertion, *see* Anne Arundel County, *et al.* July 24, 2019 *Ex Parte* at 6, given that Congress in section 636(c) expressly preempted certain state and local laws, we need not find that federal preemption of laws governing intrastate telecommunications services is permissible under the "impossibility exception." Nevertheless, we find that the impossibility doctrine further supports our decision herein. *See Min. Pub. Util. Comm'n v. FCC*, 483 F.3d 570, 578 (8th Cir. 2007) ("the 'impossibility exception' of 47 U.S.C. § 152(b) allows the FCC to preempt state regulation of a service if (1) it is not possible to separate the interstate and intrastate aspects of the service, and (2) federal regulation is necessary to further a valid federal regulatory objective, *i.e*., state regulation would conflict with federal regulatory policies.").

[329] Contrary to the suggestion of the City of Eugene, our preemption authority does not depend on Section 706 of the Act. *See* City of Eugene July 24, 2019 *Ex Parte* at 5.

[330] *First Report and Order*, 22 FCC Rcd at 5157, para. 128.

[331] *See, e.g.*, *Liberty Cablevision of Puerto Rico, Inc. v. Municipality of Caguas*, 417 F.3d 216, 219-221 (1st Cir. 2005) (finding municipal ordinances that imposed franchise fees on cable operators were preempted under section 636(c) where inconsistent with section 622 of the Communications Act). The Commission bears the responsibility of determining the scope of the subject matter expressly preempted by section 636(c). *See Cipollone v. Liggett Group, Inc.*, 505 U.S. 504, 519 (1992); *Capital Cities Cable v. Crisp*, 467 U.S. 691, 699 (1984).

[332] *See, e.g.*, NATOA *et al*. Comments at 14-18; NATOA *et al*. Reply at 13; City of Philadelphia *et al*. Reply at 22-
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sources outside Title VI. Although the record reveals that such regulation takes many different forms, NCTA and other industry advocates have expressed acute concerns about two particular kinds of state and local regulation: (1) requirements obligating cable operators with a Title VI franchise that are subject to the franchise fee requirement in section 622(b) of the Act to pay additional fees for the provision of non-cable services (such as broadband Internet access) via their cable systems; and (2) requirements obligating cable operators with a Title VI franchise to secure an additional franchise (or other authorization) to provide non-cable services over their cable systems.[385] Our preemption decisions today are carefully tailored to address these problems and prevent states and localities from continuing to circumvent the carefully calibrated terms of Title VI through these and similar kinds of regulations.

104. We disagree with those commenters who attempt to minimize the harm posed by the state and local requirements that we preempt today. We disagree, for example, that cable industry claims regarding the impact of duplicative fee and franchise requirements on broadband deployment are belied by the industry's substantial investments to date in broadband infrastructure, and that such requirements thus will not adversely affect broadband investment going forward.[386] As the record reflects, even if cable operators were to continue to invest, such investments likely would be higher absent such requirements, and even small decreases in investment can have a substantial adverse impact on consumer welfare.[387] We also are persuaded that the imposition of duplicative requirements may deter investment in new infrastructure and services irrespective of whether or to what extent a cable operator passes on those costs to consumers.[388] Contrary to the assertions of some commenters,[389] we also believe that such requirements impede Congress's goal to accelerate deployment of "advanced telecommunications capability to all Americans."[390]

105. *Other Legal Considerations.* In reaching our decision today, we agree with the majority of courts that have found that a Title VI franchise authorizes a cable operator to provide non-cable services without additional franchises or fee payments to state or local authorities.[391] In so doing, we repudiate the reasoning in a 2016 decision by the Supreme Court of Oregon in *City of Eugene v.*

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23; NATOA Mar. 15, 2019 *Ex Parte* at 2; Anne Arundel County *et al*. Comments at 37-39. *See also* City of Eugene Sept. 19, 2018 *Ex Parte* at 29-31, *citing Gregory v. Ashcroft*, 501 U.S. 452, 460-61 (1991) (asserting that if Congress intends to preempt a power traditionally exercised by state or local governments, it must make such intent unmistakably clear in the language of the statute).

[333] 47 U.S.C. § 541(a)(2).

[334] *Id*. § 541(b)(1).

[335] *Id*. § 522(5). *See also id.* § 544(b) (establishing limitations on rules for "establishment or operation of a cable system"). We therefore reject LFA assertions that the absence in section 621(a)(2) of an express grant of authority to "operate" a cable system evinces Congress's intent that a Title VI franchise bestow only the right to construct, but not to operate, a cable system over public rights-of-way. *See, e.g.*, Anne Arundel County *et al*. Comments at 43.

[336] NCTA May 3, 2019 *Ex Parte* at 2 (urging the Commission to clarify that the Act precludes duplicative authorizations and fees imposed for access to rights-of-way to deploy Wi-Fi and small cell antennas attached to, or part of, the cable system); NCTA June 11, 2018 *Ex Parte* at 2 (asserting that certain localities have refused to authorize permits allowing installation of Wi-Fi equipment on cable facilities on the basis that the equipment does not support cable service, even though the equipment is used, in part, to allow cable subscribers to watch subscription video programming).

[337] As noted, under section 621(a)(2), "[a]ny franchise shall be construed to authorize the construction of a cable system over public rights-of-way." 47 U.S.C. § 541(a)(2). Because the "construction of a cable system" includes the installation of facilities and equipment needed to provide both cable and non-cable services, such as wireless broadband and Wi-Fi services, the grant of a Title VI franchise bestows the right to place facilities and equipment in rights-of-way to provide such services.

[338] *See, e.g.*, 47 U.S.C. § 522(7)(C) (providing that a "cable system" shall extend to the facility of a common carrier providing a Title II service only "to the extent such facility is used in the transmission of video programming
(continued….)

Comcast,[392] which appears to have prompted an increasing number of states and municipalities to impose fees on franchised cable operators' provision of non-cable services.[393] In *Eugene*, the court upheld the city's imposition of a separate, additional "telecommunications" license fee on the provision of broadband services over a franchised cable system, reasoning that the fee was not imposed pursuant to the city's Title VI cable franchising authority, but rather, under the city's authority as a local government to impose fees for access to rights-of-way for the provision of telecommunications services. For the reasons stated above, we conclude that *Eugene* fundamentally misreads the text, structure, and legislative history of the Act, and clarify that any state or local regulation that imposes on a cable operator fees for the provision of non-cable services over a cable system franchised under Title VI conflicts with section 622(b) of the Act and is preempted under section 636(c).[394]

106. As noted above, although Sections 602(7)(C) and 624(b)(1) by their terms circumscribe *franchising authority* regulation of non-cable services *pursuant to Title VI*, section 636(c) makes clear that state and local authorities may not end-run the provisions of Title VI simply by asserting some other source of authority—such as their police powers to regulate access to public rights-of-way—to accomplish what Title VI prohibits. To be sure, section 636(a) provides that "[n]othing in [Title VI] shall be construed to affect any authority of any State, political subdivision, or agency thereof, or franchising authority, regarding matters of public health, safety, and welfare, to the extent consistent with the express provisions of [Title VI]."[395] While we recognize that states and municipalities possess authority to manage rights-of-way that is distinct from their cable franchising authority under Title VI,[396] states and localities may not exercise that authority in a manner that conflicts with federal law. As the U.S. Supreme Court has found, "[w]hen federal officials determine, as the FCC has here, that restrictive regulation of a particular area is not in the public interest, [s]tates are not permitted to use their police power to enact such . . . regulation."[397]

107. Our decision today still leaves meaningful room for states to exercise their traditional police powers under section 636(a).[398] While we do not have occasion today to delineate all the

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directly to subscribers . . .").

[339] *Id*. § 521(4).

[340] *Id*. § 544(b)(1).

[341] 1984 Cable Act House Report, 1984 U.S.C.C.A.N. at 4681 ("[C]able operators are permitted under the provisions of [the Cable Act] to provide any mixture of cable and non-cable service they choose."). *See also Heritage Cablevision Assocs. of Dallas, L.P. v. Texas Utils. Elec. Co.,* 6 FCC Rcd 7099, 7104, para. 24 (1991) ("[T]he House report accompanying the Cable Act clearly defeats [the] claim that a cable operator's facilities cease being a 'cable system' merely because they carry non-cable communications services in addition to video entertainment."), *aff'd*, *Texas Utils. Elec. Co. v. FCC*, 997 F.2d 925, 931-932 (D.C. Cir. 1993).

[342] 47 U.S.C. § 542. *See also* 1984 Cable Act House Report, 1984 U.S.C.C.A.N. at 4663 (recognizing local government's entitlement to "assess the cable operator a fee for the operator's use of public ways" and establishing "the authority of a city to collect a franchise fee"); *First Report and Order*, 22 FCC Rcd at 5161, para. 135 (stating that "Congress enacted the cable franchise fee as the consideration given in exchange for the right to use the public ways").

[343] 47 U.S.C. § 542(b) (emphasis added).

[344] *Id*. § 542(g)(1).

[345] NCTA Apr. 19, 2019 *Ex Parte* at 2-3 (claiming that some governmental entities, such as the state of California, are imposing fees that exceed the five percent cap by styling such fees as a "tax" that nominally applies to other users of the rights-of-way, but whose valuation is inextricably linked to the provision of video services).

[346] State and local advocates do not appear to dispute that section 622(b) limits franchise fees to five percent of a cable operator's gross revenues derived from the provision of cable service only. *See, e.g.*, NATOA *et al*.
(continued….)

categories of state and local rules saved by that provision, we note that states and localities under section 636(a) may lawfully engage in rights-of-way management (*e.g.*, road closures necessitated by cable plant installation, enforcement of building and electrical codes) so long as such regulation otherwise is consistent with Title VI.[399] Similarly, we do not preempt state regulation of telecommunications services that are purely intrastate, such as requirements that a cable operator obtain a certificate of public convenience and necessity to provide such services. State regulation of intrastate telecommunications services is permissible so long as it is consistent with the Act and the Commission's implementing rules and policies.[400] We also do not disturb or displace the traditional role of states in generally policing such matters as fraud, taxation, and general commercial dealings, so long as the administration of such laws does not interfere with federal regulatory objectives.[401]

108. We also find unconvincing Anne Arundel County *et al*.'s argument that the Commission's preemption of state and local management of public rights-of-way violates the Tenth Amendment to the U.S. Constitution by "direct[ing] local governments to surrender their property and management rights to generate additional funds for use in the expanded deployment of broadband."[402] In particular, Anne Arundel County *et al*. contends that by preventing states and localities from overseeing use of their rights-of-way, the Commission effectively is commanding them to grant rights-of-way access on terms established by the Commission, rather than state or local governments.[403] That argument fails for multiple reasons.

109. The Tenth Amendment provides that "[t]he powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."[404] We find that Anne Arundel County *et al*. has failed to demonstrate any violation of the Tenth Amendment.[405] As the Supreme Court has stated, "[i]f a power is delegated to Congress in the Constitution, the Tenth Amendment expressly disclaims any reservation of that power to the States."[406] Therefore, when Congress acts within the scope of its authority under the Commerce Clause, no Tenth Amendment issue arises.[407] Regulation of interstate telecommunications and information services, and

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Comments at 21-22; CAPA Reply at 20. *See also* City of New York Comments at 13. Rather, their claims, as discussed herein, are that fees on broadband and telecommunications services are not "franchise fees" at all—claims that we show are belied by the text, structure, and purposes of Title VI.

[347] *See, e.g.,* NCTA Apr. 19, 2019 *Ex Parte* at 1-2, *citing Liberty Cablevision,* 417 F.3d at 223; NCTA July 3, 2019 *Ex Parte* at 2 (asserting that the state of Maryland has begun to require franchised cable operators to enter into separate "resource sharing agreements" with the state's Department of Information Technology that impose duplicative fees and other requirements for continued access to rights-of-way).

[348] CAPA Reply at 20-21. *See also* NATOA *et al.* July 24, 2019 *Ex Parte* at 25-28 (asserting that the Act does not preclude local governments from exercising generally-applicable rights-of-way authority over a cable operator's provision of non-cable services).

[349] 47 U.S.C. § 522(5) (emphasis added).

[350] *Id.* As NCTA notes, a service provider may have status as a cable operator *either* because of its provision of cable service *or* because of its operation of a cable system. NCTA Mar. 13, 2019 *Ex Parte* at 12, n.64, *citing* 47 U.S.C. § 522(5). A service provider that is operating a cable system to provide broadband Internet access service thus is providing such service "solely because of" its status as a cable operator. 47 U.S.C. § 542(g)(1).

[351] *Id*.

[352] *Williams v. Taylor*, 529 U.S. 362, 404 (2000) (holding that, where possible, every word in a statute should be given meaning).

[353] *See* NCTA Mar. 13, 2019 *Ex Parte* at 12-13. Although a "franchise fee" does not include "any tax, fee, or assessment of general applicability," we note that this exception excludes a tax, fee, or assessment "which is unduly discriminatory against cable operators or cable subscribers." 47 U.S.C. § 542(g)(2)(A). Even if "telecommunications" fees such as those at issue in *Eugene* could reasonably be characterized as fees of general applicability by virtue of their application to providers other than cable operators, we find that such fees would be
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cable services, is within Congress' authority under the Commerce Clause.[408] Thus, because our authority derives from a proper exercise of Congressional power, the Tenth Amendment poses no obstacle to our preemption of state and local laws and other legal requirements.[409]

110. We also find no merit to arguments that the Commission's preemption of certain state and local requirements constitutes an improper "commandeering" of state governmental power.[410] The Supreme Court has recognized that "where Congress has the authority to regulate private activity under the Commerce Clause," Congress has the "power to offer States the choice of regulating that activity according to federal standards or having state law preempted by federal regulation."[411] Title VI provides that a franchising authority "may award" franchises "in accordance with this title."[412] It thus simply establishes limitations on the scope of that authority when and if exercised. Here, we are simply requiring that, should state and local governments decide to open their rights-of-way to providers of interstate communication services within the Commission's jurisdiction, they do so in accordance with federal standards. As noted, Congress in Section 636(c) expressly authorized Commission preemption of state and local laws and other legal requirements that conflict with federal standards.[413] Because the Commission has the constitutional authority to adopt such standards, and because those standards do not require that state or local governments take or decline to take any particular action, we conclude that our preemption decisions in this Order do not violate the Tenth Amendment.[414]

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"unduly discriminatory" – and thus constitute "franchise fees" -- as applied to franchised cable operators. This is because such fees are assessed on cable operators *in addition to* the five percent franchise fees such operators must pay for use of public rights-of-way. That is, cable operators must pay *twice* for access to rights-of-way (*i.e.,* one fee for cable service and a second fee for non-cable service), whereas non-cable providers must pay only once for such access (*i.e.,* for non-cable service). NCTA Mar. 13, 2019 *Ex Parte* at 13. We, therefore, conclude that interpreting the Act to preclude localities from assessing fees on cable operators' use of rights-of-way to provide non-cable services would be "competitively neutral and nondiscriminatory," contrary to the suggestion of some commenters. *See, e.g.*, NATOA *et al.* July 24, 2019 *Ex Parte* at 9.

[354] *See* NCTA Mar. 13, 2019 *Ex Parte* at 12-13.

[355] We thus disagree with assertions that Congress did not intend for franchise fees to cover cable operators' use of public property for the provision of services other than cable services. *See, e.g.*, AWC Reply at 9 ("Congress determined . . . that a fair compensation for the use of the rights-of-way for the purpose of providing cable service can be up to [five percent] of cable gross revenues. . . . [T]he right to occupy this limited and valuable public property for other purposes was never intended to be compensated by the provisions of the Cable Act.").

[356] S. Rep. No. 98-67, at 25 (1983) ("The committee feels it is necessary to impose such a franchise fee ceiling because . . . without a check on such fees, local governments may be tempted to solve their fiscal problems by what would amount to a discriminatory tax not levied on cable's competitors."). *See also* 129 Cong. Rec. S8254 (daily ed. June 13, 1983) (statement of Sen. Goldwater) (stating that the purpose of the cap was to prevent franchising authorities from "taxing private cable operators to death as a means of raising . . . revenues for other concerns").

[357] 47 U.S.C. § 542(b) (Supp. I 1992), *amended by* 47 U.S.C. § 542(b) (Supp. II 1996).

[358] The conference agreement adopted the House version of this provision. *See* H.R. Rep. No. 104-458, at 180 (1996) (Conf. Rep.).

[359] H.R. Rep. No. 204, 104th Cong., 1st Sess. 93 (1995) (emphasis added). We note that the Senate Report similarly clarifies that this amendment to section 622 "was intended to make clear that the franchise fee provision is not intended to reach revenues that a cable operator derives from providing new telecommunications services over its system that are different from the cable-related revenues operators have traditionally derived from their systems." S. Rep. 104-23, at 36 (1995).

[360] *See* CAPA Reply at 20-21.

[361] Anne Arundel County *et al.* July 24, 2019 *Ex Parte* at 5-6.

D. State Franchising Regulations

111. As proposed in the *Second FNPRM*, we find that the conclusions set forth in this Order, as well as the Commission's decisions in the *First Report and Order*[415] and *Second Report and Order*,[416] as clarified in the *Order on Reconsideration*,[417] apply to franchising actions taken at the state level and state regulations that impose requirements on local franchising. In the *First Report and Order*, the Commission declined to "address the reasonableness of demands made by state level franchising authorities" or to extend the "findings and regulations" adopted in its section 621 orders to actions taken at the state level.[418] It noted that many state franchising laws had only been in effect for a short time and that the Commission lacked a sufficient record regarding their effect.[419] In the *Order on Reconsideration*, the Commission indicated that if any interested parties believed the Commission should revisit the issue in the future, they could present the Commission with evidence that the findings in the *First Report and Order* and *Second Report and Order* "are of practical relevance to the franchising process at the state-level and therefore should be applied or extended accordingly."[420]

112. In the *Second FNPRM*, we again asked whether the Commission should apply the decisions in this proceeding to franchising actions and regulations taken at the state level.[421] As we noted, more than ten years have passed since the Commission first considered whether to apply its decisions interpreting section 621 to state-level franchising actions and state regulations. The decade of experience with the state-franchising process, along with comments responding to the questions related to this issue raised in the *Second FNPRM*, provide us with an adequate record regarding the effect of state involvement in the franchising process.

113. We now find that the better reading of the Cable Act's text and purpose is that that the

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[362] 47 U.S.C. § 541(d)(2).

[363] 1984 Cable Act House Report, 1984 U.S.C.C.A.N. at 4700.

[364] NCTA July 25, 2019 *Ex Parte* at 5-6.

[365] 1984 Cable Act House Report, 1984 U.S.C.C.A.N. at 4666.

[366] *Restoring Internet Freedom Order,* 33 FCC Rcd at 430, para. 199 (reaffirming the Commission's view that Internet access service is jurisdictionally interstate because a substantial portion of Internet traffic involves accessing interstate or foreign websites).

[367] The Commission recognized as much when it stated:

> [T]he Commission has independent authority to displace state and local regulations in accordance with the longstanding federal policy of nonregulation for information services. For more than a decade prior to the 1996 Act, the Commission consistently preempted state regulation of information services (which were then known as "enhanced services"). When Congress adopted the Commission's regulatory framework and its deregulatory approach to information services in the 1996 Act, it thus embraced our longstanding policy of preempting state laws that interfere with our federal policy of nonregulation.

Restoring Internet Freedom Order, id. at 431*,* para. 202, *citing Petition for Declaratory Ruling that Pulver.com's Free World Dialup Is Neither Telecommunications Nor a Telecommunications Service*, Memorandum Opinion and Order, 19 FCC Rcd 3307, 3316-23, paras. 15-25 (2004) (discussing the federal policy of nonregulation for information services). Because broadband Internet access service is jurisdictionally interstate whether classified as a telecommunications or an information service, regulatory authority over such service resides exclusively with the Commission.

[368] *See California v. FCC*, 39 F.3d 919 (9th Cir 1994); *Petition for Emergency Relief and Declaratory Ruling Filed by the BellSouth Corp*., 7 FCC Rcd 1619 (1992).

[369] We also reject claims that section 621(d)(1)'s grant to states of authority to require the filing of tariffs by cable operators for the provision of certain non-cable services reflects Congress's intent to permit state regulation of those services. Anne Arundel County *et al.* July 24, 2019 *Ex Parte* at 5. As explained in section III.B. above, that (continued….)

rules and decisions adopted in this Order, as well as those adopted in the *First Report and Order* and *Second Report and Order*, should fully apply to state-level franchising actions and regulations. First, we see no statutory basis for distinguishing between state- and local-level franchising actions. Nor do we think such a distinction would further Congress's goals: unreasonable demands by state-level franchising authorities can impede competition and investment just as unreasonable demands by local authorities can. While we need not opine on the reasonableness of specific state actions raised by commenters, we find that there is evidence in the record that state franchising actions—alone or cumulatively with local franchising actions—in some cases impose burdens beyond what the Cable Act allows.[422] We see no reason—statutory or otherwise—why the Cable Act would prohibit these actions at the local level but permit them at the state level.

114. The Cable Act does not distinguish between state and local franchising authorities. Section 621(a) and the other cable franchising provisions of Title VI circumscribe the power of "franchising authorities" to regulate services provided over cable systems.[423] The Cable Act defines "franchising authority" as "any governmental entity empowered by Federal, State or local law to grant a franchise."[424] In other words, the provisions of Title VI that apply to "franchising authorities" apply equally to any entity "empowered by . . . law"—including state law—"to grant a franchise." Many states have left franchising to local authorities, making those authorities subject to the limits imposed under Title VI.[425] Twenty-three states, however, have empowered a state-level entity, such as a state public utility commission, to grant cable franchise authorizations, rendering them "franchising authorities" under Title VI.[426] Bolstering the conclusion that Congress intended the Cable Act to govern state-level action is section 636 of the Cable Act, which expressly preempts "any provision of law *of any State*, political subdivision, or agency thereof, or franchising authority, or any provision of any franchise granted by such authority" that conflicts with the Cable Act.[427] Limiting the Commission's rulings to local-level action

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provision was intended only to permit states to require tariffs for services that they otherwise were authorized to regulate, such as telecommunications services that are purely intrastate. *See* 1984 Cable Act House Report, 1984 U.S.C.C.A.N. at 4698 ("A regulatory agency [under section 621(d)] may require a cable operator to file an informational tariff for a non-cable communications service only if the agency has jurisdiction over a common carrier's provision of such a service.").

[370] NATOA Mar. 15, 2019 *Ex Parte* at 2, *citing* H.R. Conf. Rep. No. 104-458, at 209 (1996), reprinted in 1996 U.S.C.C.A.N. 124, 223 (emphasis added).

[371] As some LFA advocates note, Anne Arundel County *et al.* July 25, 2019 *Ex Parte* at 10, n.29, the Commission previously noted in passing that, while a cable operator is not required to pay cable franchise fees on revenues from non-cable services, this rule "does not apply to non-cable franchise fee requirements, such as any lawful fees related to the provision of telecommunications service." *Second Report and Order*, 22 FCC Rcd at 19638, para. 11, n.31. For the reasons explained below, we would deem an LFA's assessment of a cable operator twice for accessing public rights-of-way (once as a cable operator and again as a telecommunications provider) to be unlawful as not "fair and reasonable" nor "competitively neutral and nondiscriminatory." *See infra* note 372. *See also* 47 U.S.C. § 253(c). To the extent our earlier statement may suggest any broader application, we disavow it based on the record before us and the arguments made throughout this item.

[372] We disagree with LFA assertions that this interpretation is inconsistent with section 253 of the Act and the Commission's 2018 *Wireless Infrastructure Order*. Anne Arundel County *et al.* July 24, 2019 *Ex Parte* at 10, n.29, *citing Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment,* Declaratory Ruling and Third Report and Order, 33 FCC Rcd 9088, n. 130 (2018). Although section 253 permits states and localities to require "fair and reasonable" compensation from telecommunications providers on a

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would call for some plausible interpretation of these provisions; those opposing the extension of the Commission's rulings to state franchising authorities offer none. Accordingly, we find that the Cable Act does not distinguish between state- and local-level franchising actions, and that the Commission's rulings should therefore apply equally to both.

115. In addition, we find unavailing claims in the record that the Commission should limit its decisions to local authorities for policy reasons. To the contrary, we find that extending the Commission's rulings to state level franchising actions and regulations furthers the goals of the Cable Act. Unreasonable barriers to entry imposed by any franchising authority—state or local—frustrate the goals of competition and deployment. In the *First Report and Order*, we found that removing regulatory obstacles posed by local franchising authorities would further these goals.[428] We now find that this policy rationale applies with equal force to franchising actions taken at the state level.

116. We disagree that extending the Commission's rulings to state-level franchising and regulation, however, will eliminate the benefits of state-level action. We are not persuaded that extending the Commission's rulings to state-level actions would prevent—or even discourage—state-level franchising and regulation. Indeed, applying the Commission's rulings to state-level action will merely ensure that the same rules that apply to LFAs also apply at the state level.[429] This consistency is itself beneficial, ensuring that various statutory provisions—such as sections 621 and 622—are interpreted uniformly throughout the country. As one commenter notes, "state-level cable regulations may be modeled on the federal act, and so, allowing disparate interpretations of the same language could lead to confusion among consumers, regulators, and franchisees."[430]

117. Nor should applying our interpretations of the Cable Act to state-level actions interfere with states' authority to enact general taxes and regulations. Some commenters express concern that the Commission's rulings would disturb state franchising laws that apply more broadly than the Cable Act.[431] While we decline here to opine on the application of the Cable Act to specific state laws, we note that

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"competitively neutral and nondiscriminatory basis" for use of public rights-of-way, 47 U.S.C. § 253(c), as explained above, we find that imposing fees on cable operators beyond what Title VI allows is neither "fair and reasonable" nor "competitively neutral and nondiscriminatory." Moreover, although the Commission in the *Wireless Infrastructure Order* concluded, among other things, that fees to use the rights-of-way to deploy small cells for the provision of telecommunications must be cost-based and no greater than those charged to "similarly situated" entities for comparable uses of the rights-of-way, we do not believe that our approach today introduces any inconsistency. Rather, as NCTA notes, we merely recognize that under the Act, cable operators must compensate local governments for accessing public rights-of-way under a statutory framework different from that applicable to telecommunications providers, and that Congress did not intend for them to be assessed twice for the provision of cable service or the facilities used in the provision of such service. NCTA July 25, 2019 *Ex Parte* at 6-7. Any difference in approach, therefore, follows from different standards established by Congress in Sections II and VI of the Act.

[373] In the *Cable Modem Declaratory Ruling*, for example, the Commission stated:

> We note that section 622(b) provides that 'the franchise fees paid by a cable operator with respect to any cable system shall not exceed [five percent] of such cable operator's gross revenues derived . . . from the operation of the cable system to provide cable services.' Given that we have found cable modem service to be an information service, revenue from cable modem service would not be included in the calculation of gross revenues from which the franchise fee ceiling is determined.

Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Declaratory Ruling and Notice of Proposed Rulemaking, 17 FCC Rcd 4798, 4851, para. 105 (2002) (citations omitted) (*Cable Modem Declaratory Ruling*).

[374] In the *First Report and Order*, the Commission affirmed its 2002 interpretation of section 622(b):

> We clarify that a cable operator is not required to pay franchise fees on revenues from non-cable services. Section 622(b) provides that the 'franchise fees paid by a cable operator with respect to

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these concerns are largely settled by section 622, which excludes "any tax, fee, or assessment of general applicability" from the definition of franchise fees.[432] Other provisions of the Act similarly make clear that the Act does not affect state authority regarding matters of public health, safety, and welfare, to the extent that states exercise that authority consistent with the express provisions of the Cable Act.[433]

118. Finally, some commenters assert that extending the Commission's rulings to state-level actions would "upend carefully balanced policy decisions by the states."[434] According to commenters, local governments might wish to refuse these benefits if they come at the expense of franchise fees—but they will be unable to do so where they are mandated by state law.[435]

119. We are not convinced that these concerns justify limiting the Commission's rulings to local-level actions. Again, our conclusion in this section will disturb existing state laws only to the extent that they conflict with the Cable Act and the Commission's rulings implementing the Act. While this may upset some preexisting legislative compromises, it will also root out state laws that impose demands and conditions that Congress and the Commission have found to be unreasonable. Further, ensuring that the Cable Act is applied uniformly between state and local franchising authorities is necessary to further the goals of the Act, and more importantly, is consistent with the language of the Act. As some commenters have noted, if the Commission does not apply these requirements to state franchises, states could pass laws circumventing the Cable Act's limitations on LFAs.[436] That result would thwart Congress's intent in imposing those limitations. For these reasons, we conclude that the benefits of extending the Commission's rulings and interpretations to state-level actions outweigh any burdens caused by upsetting existing state-level policy decisions.

IV. PROCEDURAL MATTERS

120. *Final Regulatory Flexibility Act Analysis*. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[437] the Commission has prepared a Final Regulatory Flexibility Act Analysis

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> any cable system shall not exceed [five percent] of such cable operator's gross revenues derived . . . from the operation of the cable system to provide *cable services'*. . . . The Commission [has] determined . . . that a franchise authority may not assess franchise fees on non-cable services, such as cable modem service. . . . Although [the *Cable Modem Declaratory Ruling*] related specifically to Internet access service revenues, the same would be true for other 'non-cable' service revenues. Thus, Internet access services, including broadband data services, and any other non-cable services are not subject to 'cable services' fees.

First Report and Order, 22 FCC Rcd at 5146, para. 98 (emphasis in original) (citations omitted).

[375] *ACLU v. FCC*, 823 F.2d 1554, 1574 (D.C. Cir. 1987).

[376] *See, e.g.*, 47 U.S.C. § 541(b)(3)(B) ("A franchising authority may not impose any requirement under this subchapter that has the purpose or effect of prohibiting, limiting, restricting, or conditioning the provision of a telecommunications service by a cable operator or an affiliate thereof"); *id.* § 541(D) (A franchising authority may not impose any requirement under this subchapter that has the purpose or effect of prohibiting, limiting, restricting, or conditioning the provision of a telecommunications service by a cable operator or an affiliate thereof). *See also Montgomery County*, 863 F.3d at 492 ("The Act also makes clear that local franchising authorities can regulate so called 'Title II carriers' (basically, providers of phone services) only to the extent that Title II carriers provide cable services.").

[377] 47 U.S.C. § 544(b)(1).

[378] *See supra* paras. 72-76.

[379] We reject arguments that the Commission lacks authority to preempt state and local regulation of information services without asserting ancillary jurisdiction over information services. *See, e.g.*, Public Knowledge Comments

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at 1; Common Frequency Comments at 5 (claiming that if the Commission has no authority to regulate information services, then it has no ability to preempt conflicting state and local regulation). Because we are relying on express preemption authority under section 636(c), there is no reason for us to rely upon ancillary authority in this proceeding.

[380] 47 U.S.C. § 521(6).

[381] *Id*. § 521(4).

[382] *Id*. § 230(b)(2). "Interactive computer services" are defined, in relevant part, as "any information service, system, or access software provider that provides or enables computer access by multiple users to a computer server, including specifically a service or system that provides access to the Internet . . . ." *Id*. § 230(f)(2).

[383] *See*, *e.g.*, *Cable Modem Declaratory Ruling*, 17 FCC Rcd at 4850, para. 102; *Restoring Internet Freedom Order*, 33 FCC Rcd at 426-28, paras. 194-95. *See also Charter Advanced Services (MN), LLC v. Lange*, No. 17-2290 (8th Cir. filed Sept. 7, 2018) (noting that "[a]ny [local] regulation of an information service conflicts with the federal policy of nonregulation" and is therefore preempted).

[384] *See, e.g.*, NCTA Comments at 26-28; NCTA Reply, Appendix; NCTA Mar. 13, 2019 *Ex Parte* at 10; NCTA June 11, 2018 *Ex Parte* at 4-5.

[385] NCTA Comments at 26-28; Altice Reply at 14.

[386] *See, e.g.*, City of New York Reply at 2-3 (asserting that restricting LFA authority to regulate incumbent cable operators' provision of non-cable services will not facilitate broadband deployment). *See also* Anne Arundel County *et al.* Reply at Exh. 5; Anne Arundel County *et al.* July 24, 2019 *Ex Parte* and Atts. (submitting analyses purporting to show that rights-of-way fees and practices at the local level have a minor impact on cable operators' broadband deployment decisions). Although LFAs also submitted an engineering analysis of public rights-of-way processes, *id.,* because this study is from 2011 and does not address cable franchise fees, it has no bearing on our findings herein. NCTA July 25, 2019 *Ex Parte* at 11-12.

[387] Orszag/Shampine Analysis at 17.

[388] *Id*. at 13 (claiming that LFAs' imposition of fees on non-cable services would deter investment in new infrastructure and services regardless of whether cable operators can pass some or all of those costs through to consumers). *See also* Americans for Tax Reform May 8, 2019 *Ex Parte,* Att. (using a two-stage investment model to show how local authorities' extra-statutory exactions deter investment by incumbent and new entrant cable operators).

[389] *See, e.g.*, AWC Reply at 11-13.

[390] 47 U.S.C. § 1302. MMTC asserts, for example, that the adverse effects of such local regulations are likely to be felt most acutely by consumers, particularly small businesses and people in low income communities. MMTC Apr. 25, 2019 *Ex Parte* at 1. In particular, MMTC asserts that:

> [D]uplicative fees . . . are most burdensome to lower-income households that spend a far larger share of their income on broadband than wealthier families . . . . [and] small, minority businesses. . . . Increased broadband access costs can be especially problematic for the unemployed or underemployed who become shut out from the very tools they need to pursue new skills and opportunities.

Id. at 1-2.

[391] *See, e.g.*, *Comcast Cable of Plano, Inc. v. City of Plano,* 315 S.W.3d 673, 681 (Tex. App. 2010); *City of Chicago v. Comcast Cable Holdings, LLC*, 231 Ill.2d 399, 412-413 (2008). *See also City of Minneapolis v. Time Warner Cable, Inc.*, No. CIV.05-994 ADM/AJB, 2005 WL 3036645, at *5-6 (D. Minn. Nov. 10, 2005); *City of Chicago v. AT&T Broadband, Inc.*, No. 02-C-7517, 2003 WL 22057905, at *6 (N.D. Ill. Sept. 4, 2003); *Parish of Jefferson v. Cox Communications La., LLC,* No. 02-3344, 2003 WL 21634440, at *4-8 (E.D. La. July 3, 2003). *See also* NCTA June 11, 2018 *Ex Parte* at 3, n.9.

[392] *See Eugene*, 375 P.3d 446. The regulations at issue in *Eugene* included that: (i) Comcast's franchise agreement for the provision of cable services over the city's public rights-of-way did not give it the right to provide cable

(continued….)

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modem service over those rights-of-way; (ii) the Communications Act did not give Comcast an independent right to provide cable modem service over the city's public rights-of-way; (iii) the Act did not preclude the city from assessing fees on revenues derived from Comcast's provision of cable modem service over public rights-of-way; and (iv) such fees did not constitute franchise fees under section 622(b) of the Act. *See id*. at 453-463.

[393] NCTA asserts that in the wake of *Eugene*, a multitude of cities in Oregon have adopted or reinterpreted ordinances to impose fees on gross revenues derived from the provision of broadband services, in addition to those already imposed under cable franchises. NCTA Comments at 26-27; NCTA Mar. 13, 2019 *Ex Parte* at 9, 11-12. NCTA notes that multiple communities in Ohio also have passed ordinances requiring that cable operators secure a "Certificate of Registration" in addition to a state-issued cable franchise before offering non-cable services, and that such certificates require payment of additional fees as a condition of occupying rights-of-way. NCTA Comments at 27. NCTA asserts further that such duplicative fees are imposed not only at the local level, but also at the state level. *Id.*

[394] Such regulation includes not only requirements imposed by a state or locality acting pursuant to the cable franchising provisions of Title VI, but also requirements imposed by a state or locality purportedly acting pursuant to any powers granted outside Title VI.

[395] 47 U.S.C. § 556(a).

[396] *See, e.g.*, MassAccess Reply at 11-12 (asserting that "[t]he authority and police powers vested in state and municipal governments encompass significantly more than those in the Cable Act. . . . [and] arise from a number of sources, including . . . municipal law, state law, common law, and [f]ederal statutes and regulations"); City of Philadelphia *et al*. Comments at 16-17 (claiming that local governments do not derive their authority over Title I and Title II services from federal law, but rather, sources such as state law, state constitutions, municipal charters, and state common law). *See also* Anne Arundel County *et al*. Comments at 37-39; Free Press Reply at 7; Anne Arundel County *et al.* July 24, 2019 *Ex Parte* at 5.

[397] *Capital Cities Cable, Inc. v. Crisp*, 467 U.S. 691, 708 (1984).

[398] Given the robust scope that we retain in this Order for the operation of section 636(a), we reject the City of Eugene's assertion that we have not engaged in "meaningful discussion" of this provision. City of Eugene July 24, 2019 *Ex Parte* at 4.

[399] *See* NCTA Mar. 13, 2019 *Ex Parte* at 11.

[400] We note, for example, that section 253(a) of the Act prohibits state or local statutes, regulations, or other legal requirements that prohibit or have the effect of prohibiting the ability of any entity to provide "any interstate or *intrastate* telecommunications service." 47 U.S.C. § 253(a) (emphasis added).

[401] *See Restoring Internet Freedom Order,* 33 FCC Rcd at 428, para. 196.

[402] Anne Arundel County *et al*. Reply at 14-15.

[403] *Id*.

[404] U.S. Const. Amend. X.

[405] *Montgomery County, Md. v. FCC*, 811 F.3d 121, 127-129 (4th Cir. 2015).

[406] *See New York v. U.S.*, 505 U.S. 144, 156 (1992).

[407] *See id*. at 157-58.

[408] *MCI Telecommunications Corp. v. Bell Atlantic*, 271 F.3d 491, 503 (3rd. Cir. 2001)
("The Telecommunications Act of 1996 was clearly a congressional exercise of its Commerce Clause power.").

[409] *See Qwest Broadband Services, Inc. v. City of Boulder*, 151 F.Supp.2d 1236, 1245 ("[T]he inquiries under the Commerce Clause and the Tenth Amendment are mirror images, and a holding that a Congressional enactment does not violate the Commerce Clause is dispositive of a Tenth Amendment challenge) (citing *United States v. Baer,* 235 F.3d 561, 563 n.6 (10th Cir. 2000)).

[410] *See* Michigan Municipal League Comments at 25; Anne Arundel County *et al*. Comments at 51.

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[411] *See New York v. U.S.*, 505 U.S. at 167.

[412] 47 U.S.C. § 541(a)(1).

[413] *Id*. § 556(c).

[414] We also conclude that our actions do not violate the Fifth Amendment to the U.S. Constitution. *See, e.g.*, City of Eugene Sept. 19, 2018 *Ex Parte* at 30. The "takings" clause of the Fifth Amendment provides: "[N]or shall private property be taken for public use, without just compensation." U.S. Const. Amend. V. First, our actions herein do not result in a Fifth Amendment taking. Courts have held that municipalities generally do not have a compensable "ownership" interest in public rights-of-way, but rather hold the public streets and sidewalks in trust for the public. *Liberty Cablevision*, 417 F.3d at 222. Moreover, even if there was a taking, Congress provided for "just compensation" through cable franchise fees. *See U.S. v. Riverside Bayview Homes*, 474 U.S. 121, 128 (1985) (the Fifth Amendment does not prohibit takings, only uncompensated ones). Section 622(h)(2) of the Act provides that a franchising authority may recover a franchise fee of up to five percent of a cable operator's annual gross revenues derived from the provision of cable service. 47 U.S.C. § 542(h)(2). Congress intended that the cable franchise fee serve as the consideration given in exchange for a cable operator's right to use public rights-of-way. *See* 1984 Cable Act House Report, 1984 U.S.C.C.A.N. at 4663 (recognizing the local government's authority to "assess the cable operator a fee for the operator's use of public ways" and establishing "the authority of a city to collect a franchise fee of up to [five percent] of an operator's annual gross revenues"). Our actions herein do not eviscerate the ability of local authorities to impose such franchise fees. Rather, our actions simply ensure that local authorities do not impose duplicative fees for the same use of rights-of-way by mixed use facilities of cable operators, contrary to express statutory provisions and policy goals set forth in the Act.

[415] In the *First Report and Order*, the Commission adopted time limits for LFAs to render a final decision on a new entrant's franchise application and established a remedy for applicants that do not receive a decision within the applicable time frame; concluded that it was unlawful for LFAs to refuse to grant a franchise to a new entrant on the basis of unreasonable build-out mandates; clarified which revenue-generating services should be included in a new entrant's franchise fee revenue base and which franchise-related costs should and should not be included within the statutory five percent franchise fee cap; concluded that LFAs may not make unreasonable demands of new entrants relating to PEG channels and I-Nets; adopted the mixed-use network ruling for new entrants; and preempted local franchising laws, regulations, and agreements to the extent they conflict with the rules adopted in that order. *First Report and Order*, 22 FCC Rcd at 5134-40, paras. 66-81; *id*. at 5143-44, paras. 89-90; *id*. at 5144-51, paras. 94-109; *id*. at 5151-54, paras. 110-120; *id*. at 5155-56, paras. 121-24; *id*. at 5157-64, paras. 125-38.

[416] In the *Second Report and Order*, the Commission extended to incumbent cable operators the rulings in the *First Report and Order* relating to franchise fees and mixed-use networks and the PEG and I-Net rulings that were deemed applicable to incumbent cable operators, *i.e.*, the findings that the non-capital costs of PEG requirements must be offset from the cable operator's franchise fee payments, that it is not necessary to adopt standard terms for PEG channels, and that it is not *per se* unreasonable for LFAs to require the payment of ongoing costs to support PEG, so long as such support costs as applicable are subject to the franchise fee cap. *Second Report and Order*, 22 FCC Rcd at 19637-41, paras. 10-17.

[417] *Order on Reconsideration*, 30 FCC Rcd at 812-13, para. 7.

[418] *First Report and Order*, 22 FCC Rcd at 5102, n.2.

[419] *See id*.; *Order on Reconsideration*, 30 FCC Rcd at 812-13, para. 7.

[420] *Order on Reconsideration*, 30 FCC Rcd at 812-13, para 7.

[421] *Second FNPRM*, 33 FCC Rcd at 8971-72, para. 32. ("We seek comment on whether to apply the proposals and tentative conclusions set forth herein, as well as the Commission's decisions in the First Report and Order and Second Report and Order, as clarified in the Order on Reconsideration, to franchising actions taken at the state level and state regulations that impose requirements on local franchising.").

[422] *See*, *e.g.*, NCTA Comments at 62-64; Altice Reply at 5-6; NCTA Apr. 19, 2019 *Ex Parte* at 2.

[423] 47 U.S.C. § 541(a)(1) ("A *franchising authority* may award, in accordance with the provisions of this subchapter, 1 or more franchises within its jurisdiction; except that a *franchising authority* may not grant an exclusive franchise and may not unreasonably refuse to award an additional competitive franchise." (emphases added)).

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[424] *Id*. § 522(10).

[425] *See, e.g.*, Md. Code Ann., Local Gov't § 1-708(c) ("The governing body of a county or municipality may . . . grant a franchise for a cable television system that uses a public right-of-way . . . .").

[426] *See* Ark. Code Ann. § 23-19-203 (provider must elect either a local franchise or a state-issued certificate of franchise authority); Cal. Pub. Util. Code § 5840(a); Conn. Gen. Stat. Ann. § 16-331(a); Del. Code Ann. tit. 26, §§ 601 (state-issued franchises outside of municipalities), 608 (municipal franchises subject to PUC review); Fla. Stat. § 610.102; Ga. Code Ann. § 36-76-3 (provider must elect either a local franchise or a state-issued authorization); 220 Ill. Comp. Stat. Ann. § 5/21-301(a)(provider must elect either a local franchise or a state-issued authorization); Ind. Code § 8-1-34-16(a); Iowa Code § 477A.2; Kan. Stat. Ann. § 12-2023(a); Haw. Rev. Stat. § 440G-6; La. Rev. Stat. §§ 45:1364, 45:1377 (state is franchising authority except in home rule charter communities); Mich. Gen. Laws § 484.3305 (franchises are granted by local government, but only on uniform terms set by statute); Mo. Rev. Stat. § 67.2679.4; Nev. Rev. Stat. § 711.410; N.J. Stat. Ann. §§ 48:5A-9, 48:5A-15, 48:5A-16 (provider must elect either a local franchise or a state-issued certificate of franchise authority); N.C. Gen. Stat. Ann. § 66-351; Ohio Rev. Code Ann. § 1332.24(A)(2); S.C. Code §§ 58-12-300(5), 58-12-310; Tenn. Code Ann. § 7-59- 304(a) (provider must elect either a local franchise or a state-issued certificate of franchise authority); Tex. Util. Code Ann. § 66.001; Vt. Stat. Ann. tit. 30, § 502(b); Wis. Stat. Ann. § 66.0420(4).

[427] 47 U.S.C. § 556(c) (emphasis added). As we explain above, this preemption does not extend to state regulation of intrastate telecommunications services or regulation related to matters of public health, safety, and welfare that otherwise is consistent with the Act, and nothing in this Order is intended to disturb the traditional role that states have played in these regards. *See supra* para. 79 and *infra* para. 117.

[428] *First Report and Order*, 22 FCC Rcd at 5102, para. 1 ("We find that the current operation of the local franchising process in many jurisdictions constitutes an unreasonable barrier to entry that impedes the achievement of the interrelated federal goals of enhanced cable competition and accelerated broadband deployment.").

[429] For these reasons, we disagree with commenters who argue that applying the Commission's rules at the state level is contrary to the Cable Act's purpose of "assur[ing] that cable systems are responsive to the needs and interests of the local community." 47 U.S.C. § 521(2). The City of Philadelphia, for example, argues that extending the Commission's rules to state-level actions would "unduly restrict state and local governments from addressing local and hyperlocal cable-related issues." *See* City of Philadelphia *et al*. Comments at vii. For the reasons discussed above, we are not convinced that applying our rules to state franchising authorities will impede the ability of state and local authorities to address local issues. Rather, by doing so, we ensure that the goals of the Cable Act, as determined by Congress, including "encourag[ing] the growth and development of cable systems," are fully realized. 47 U.S.C. § 521(2).

[430] Comments of Verizon at 11-12.

[431] *See, e.g.*, Anne Arundel County *et al*. Comments at 45; City and County of San Francisco Comments at 8-9. For example, California's Digital Infrastructure and Video Competition Act (DIVCA) assesses an annual administrative fee and authorizes LFAs to assess on both cable operators and non-cable video franchise holders, up to a one-percent fee on gross revenues for PEG, in addition to a state franchise fee of five percent of gross revenues. Cal. Pub. Util. Code §§ 441 (providing for the annual determination of franchise fees), 5830(f), (h) (establishing that DIVCA applies to all "holders of a state franchise" that authorizes the "operation of any network in the right-of-way capable of providing video service to subscribers"). *See also* City and County of San Francisco Comments at 8-9. The Eastern District of California found that DIVCA was a law of "general applicability" for the purposes of section 622 in *Comcast of Sacramento*. 250 F. Supp. 3d at 624, *vacated and remanded Comcast of Sacramento I, LLC v. Sacramento Metro. Cable Television Comm'n*, No. 17-16847, 2019 WL 2018280, at *7 (9th Cir. May 8, 2019).

[432] *See, e.g.*, Anne Arundel County *et al*. Comments at 45 (quoting 47 U.S.C. § 542(g)(2)(A)).

[433] 47 U.S.C. § 556(a) ("Nothing in this subchapter shall be construed to affect any authority of any State, political subdivision, or agency thereof, or franchising authority, regarding matters of public health, safety, and welfare, to the extent consistent with the express provisions of this subchapter.").

[434] Anne Arundel County *et al*. Comments at 45-48. In Illinois, for example, state law requires that cable operators provide "line drops and free basic service to public buildings." *See* City Coalition Comments at 26 (citing 220 ILCS 5/22-501(f)). The Illinois statute defines a "service line drop" as "the point of connection between a premises and (continued….)

(FRFA) relating to this Order. The FRFA is set forth in the Appendix.

121. *Paperwork Reduction Analysis*. This document does not contain new or revised information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104-13 (44 U.S.C. §§ 3501-3520). In addition, therefore, it does not contain any new or modified "information burden for small business concerns with fewer than 25 employees" pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, 44 U.S.C. § 3506(c)(4).

122. *Congressional Review Act*. The Commission will send a copy of this Order to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. § 801(a)(1)(A).

123. *Additional Information*. For additional information on this proceeding, contact Maria Mullarkey or Raelynn Remy of the Media Bureau, Policy Division, at Maria.Mullarkey@fcc.gov, Raelynn.Remy@fcc.gov or (202) 418-2120.

V. ORDERING CLAUSES

124. Accordingly, **IT IS ORDERED** that, pursuant to the authority found in sections 1, 4(i), 201(b), 230, 303, 602, 621, 622, 624, and 636 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201(b), 230, 303, 522, 541, 542, 544, and 556, this Third Report and Order **IS ADOPTED**.

125. **IT IS FURTHER ORDERED** that the the Commission's rules **ARE HEREBY AMENDED** as set forth in Appendix A and such rule amendments shall be effective 30 days after publication in the *Federal Register*.

126. **IT IS FURTHER ORDERED** that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, **SHALL SEND** a copy of this Third Report and Order, including the Final Regulatory Flexibility Act Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

127. **IT IS FURTHER ORDERED** that, pursuant to section 801(a)(1)(A) of the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A), the Commission **SHALL SEND** a copy of the Third Report and Order to Congress and the Government Accountability Office.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

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the cable or video network that enables the premises to receive cable service or video service." 220 ILCS 5/22-501.

[435] *See id.* Similarly, one commenter claims that DIVCA reflected a legislative compromise between cable operators and franchising authorities that would be upset if the Commission's rules were extended to state level actions. Anne Arundel County *et al*. Comments at 46-47 ("For the Commission to import, wholesale, its determinations under Section 621 into the California state franchise would upset state policy and undermine the very goal of the Commission to ease entry by new entrants.").

[436] NCTA Reply at 29-30 & n.100.

[437] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601, *et. seq.,* has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 847 (1996). The SBREFA was enacted as Title II of the Contract with America Advancement Act of 1996 (CWAAA).

APPENDIX A

Final Rules

Part 76 of Title 47 of the U.S. Code of Federal Regulations is amended to read as follows:

PART 76 – MULTICHANNEL VIDEO AND CABLE TELEVISION SERVICE

1. The authority citation for Part 76 continues to read as follows:

AUTHORITY: 47 U.S.C. 151, 152, 153, 154, 201, 230, 301, 302, 302a, 303, 303a, 307, 308, 309, 312, 315, 317, 325, 338, 339, 340, 341, 503, 521, 522, 531, 532, 534, 535, 536, 537, 541, 542, 543, 544, 544a, 545, 548, 549, 552, 554, 556, 558, 560, 561, 571, 572, 573.

2. Revise Subpart C to read as follows:

Subpart C – Cable Franchising

3. Add new Section 76.42 to read as follows:

§ 76.42 – In-Kind Contributions.

(a) In-kind, cable-related contributions are "franchise fees" subject to the five percent cap set forth in 47 U.S.C. 542(b). Such contributions, which count toward the five percent cap at their fair market value, include any non-monetary contributions related to the provision of cable service by a cable operator as a condition or requirement of a local franchise, including but not limited to:

(1) Costs attributable to the provision of free or discounted cable service to public buildings, including buildings leased by or under control of the franchising authority;
(2) Costs in support of public, educational, or governmental access facilities, with the exception of capital costs; and
(3) Costs attributable to the construction of institutional networks.

(b) In-kind, cable-related contributions do not include the costs of complying with build-out and customer service requirements.

4. Add new Section 76.43 to read as follows:

§ 76.43 – Mixed-Use Rule.

A franchising authority may not regulate the provision of any services other than cable services offered over the cable system of a cable operator, with the exception of channel capacity on institutional networks.

APPENDIX B

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[1] an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Second Further Notice of Proposed Rulemaking (Second FNPRM) in this proceeding.[2] The Federal Communications Commission (Commission) sought written public comment on the proposals in the Second FNPRM, including comment on the IRFA. The Commission received one comment on the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.[3]

A. Need for, and Objectives of, the Report and Order

2. In the Report and Order, we interpret sections of the Communications Act of 1934, as amended (the Act) that govern how local franchising authorities (LFAs) may regulate cable operators and cable television services, with specific focus on issues remanded from the United States Court of Appeals for the Sixth Circuit (Sixth Circuit) in *Montgomery County, Md. et al. v. FCC* (*Montgomery County*).[4] Section 621(a)(1) of the Act prohibits LFAs from unreasonably refusing to award competitive franchises for the provision of cable television services.[5] To better define what constitutes "unreasonable" acts by an LFA, the Commission adopted rules implementing section 621(a)(1), including rules governing the treatment of certain costs and fees charged to cable operators by LFAs and LFAs' regulation of cable operators' "mixed-use" networks.[6]

3. In *Montgomery County*, the court directed the Commission on remand to provide an explanation for its decision to treat cable-related, in-kind contributions charged to cable operators by LFAs as "franchise fees" subject to the statutory five percent cap on such fees set forth in section 622(g) of the Act.[7] The court also directed the Commission to provide a statutory basis for its decision to extend its "mixed-use" ruling—which prohibits LFAs from regulating the provision of services other than cable services offered over cable systems used to provide both cable services and non-cable services—to incumbent cable operators that are not common carriers.[8] This Order seeks to explain and establish the

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[1] *See* 5 U.S.C. § 603. The RFA, 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996). The SBREFA was enacted as Title II of the Contract with America Advancement Act of 1996 (CWAAA).

[2] *See Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992*, Second Further Notice of Proposed Rulemaking, MB Docket No. 05-311, 33 FCC Rcd 8952, 8953-9 (2018) (*Second FNPRM*).

[3] *See* 5 U.S.C. § 604.

[4] *Montgomery County, Md. et al. v. FCC*, 863 F.3d 485 (6th Cir. 2017).

[5] 47 U.S.C. § 541(a)(1).

[6] *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992*, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 5101 (2007) (*First Report and Order*), *aff'd sub nom. Alliance for Community Media et al. v. FCC*, 529 F.3d 763 (6th Cir. 2008) (*Alliance*), *cert. denied*, 557 U.S. 904 (2009); *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992*, Second Report and Order, 22 FCC Rcd 19633 (2007) (*Second Report and Order*), *recon. Granted in part, denied in part*; *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992*, Order on Reconsideration, 30 FCC Rcd 810 (2015) (*Order on Reconsideration*); *Second FNPRM*, 33 FCC Rcd 8952 (2018).

[7] *Montgomery County*, 863 F.3d at 491-92.

[8] *Id*. at 493.

statutory basis for the Commission's interpretation of the Act in order to better fulfill the Commission's goals of eliminating regulatory obstacles in the marketplace for cable services and encouraging broadband investment and deployment by cable operators.

4. In this Order, we first conclude that cable-related, "in-kind" contributions required by a cable franchise agreement are franchise fees subject to the statutory five percent cap on franchise fees set forth in section 622 of the Act.[9] We base this conclusion on the broad definition of franchise fee in section 622, which is not limited to monetary contributions. We interpret the Act's limited exceptions to the definition of franchise fee, including an exemption for capital costs related to public, educational, and governmental access (PEG) channels, such as equipment costs or those associated with building a facility.[10] We also reaffirm that this rule applies to both new entrants and incumbent cable operators. Second, we conclude that under the Act, LFAs may not regulate the provision of most non-cable services, including broadband Internet access service, offered over a cable system by an incumbent cable operator that is not a common carrier. Finally, we conclude that Commission guidance concerning LFAs' regulation of cable operators should apply to state-level franchising actions and regulations that impose requirements on local franchising.

B. Legal Basis

5. The authority for the action taken in this rulemaking is contained in Sections 1, 4(i), 201(b), 230, 303, 602, 621, 622, 624, and 636 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 201, 230, 303, 522, 541, 542, 544, and 556.

C. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

6. Only one commenter, the City of Newton Massachusetts, submitted a comment that specifically responded to the IRFA.[11] The City of Newton suggests that a transition period of at least six years is needed to satisfy the Commission's Regulatory Flexibility Act obligation to minimize significant financial impacts on small communities and non-profit organizations. This City of Newton argues that this transition period is needed to allow time for affected parties to: (1) identify cable-related in kind contributions which count against the franchise fee cap; (2) reach agreement on the valuation of cable-related in-kind contributions; (3) resolve any disputes with respect to those issues; and (4) adjust their contractual commitments in light of any prospective reduction in franchise fee revenues (and the timing of those reductions).

D. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply

7. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the rules.[12] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[13] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[14] A small business concern is one which:

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[9] 47 U.S.C. § 542.

[10] *Id*.

[11] Letter from Ruthanne Fuller, Mayor and Issuing Authority, and Alan D. Mandl, Assistant City Solicitor, City of Newton, Massachusetts, to Chairman Pai and Commissioners Carr, O'Rielly and Rosenworcel, FCC, MB Docket No. 05-311, at 7 (filed Nov. 14, 2018) (City of Newton Letter); City of Newton Comments at 3-4.

[12] 5 U.S.C. § 603(b)(3).

[13] *Id.* § 601(6).

[14] *Id.* § 601(3) (incorporating by reference the definition of "small-business concern" in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes (continued….)

(1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.[15] Below, we provide a description of such small entities, as well as an estimate of the number of such small entities, where feasible.

8. *Small Businesses, Small Organizations, Small Governmental Jurisdictions.* Our actions, over time, may affect small entities that are not easily categorized at present. We therefore describe three broad groups of small entities that could be affected under these rules.[16] First, while we do use industry specific size standards for small businesses in the regulatory flexibility analysis, according to data from the SBA's Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.[17] These types of small businesses represent 99.9% of all businesses in the United States which translates to 28.8 million businesses.[18]

9. Next, the type of small entity described as a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[19] Nationwide, as of August 2016, there were approximately 356,494 small organizations based on registration and tax data filed by nonprofits with the Internal Revenue Service (IRS).[20]

10. Finally, the small entity described as a "small governmental jurisdiction" is defined generally as "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty-thousand."[21] U.S. Census Bureau data from the 2012 Census of Governments[22] indicate that there were 90,056 local governmental jurisdictions consisting of General and Specific Purpose governments in the United States.[23] Of this number there were 37,132 General Purpose governments (county,[24] municipal and town or township[25]) with populations of less than 50,000 and 12,184 Special Purpose governments (independent school districts[26] and special districts[27]) with populations of less than 50,000. The 2012 U.S. Census Bureau data for the types of governments in the local government category show that most of these governments have populations of less than 50,000.[28] Based on these data, we estimate that at least 49,316 local government jurisdictions fall in the category of

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one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

[15] 15 U.S.C. § 632.

[16] *See* 5 U.S.C. § 601(3)-(6).

[17] *See* SBA, Office of Advocacy, "Frequently Asked Questions, Question 1 – What is a small business?" https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016).

[18] *See* SBA, Office of Advocacy, "Frequently Asked Questions, Question 2 – How many small businesses are there in the U.S.?" https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016).

[19] 5 U.S.C. § 601(4).

[20] Data from the Urban Institute, National Center for Charitable Statistics (NCCS) reporting on nonprofit organizations registered with the IRS was used to estimate the number of small organizations. Reports generated using the NCCS online database indicated that as of August 2016 there were 356,494 registered nonprofits with total revenues of less than $100,000. Of this number, 326,897 entities filed tax returns with 65,113 registered nonprofits reporting total revenues of $50,000 or less. *See* https://nccs.urban.org/sites/all/nccs-archive/html//tablewiz/tw.php where the report showing this data can be generated by selecting the following data fields: Show: "Registered Nonprofit Organizations"; By: "Total Revenue Level (years 1995, Aug. to 2016, Aug.)"; and For: "2016, Aug.".

[21] 5 U.S.C. § 601(5).

[22] *See* 13 U.S.C. § 161. The Census of Governments is conducted every five (5) years compiling data for years ending with "2" and "7". *See also* Program Description Census of Government. https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=program&id=program.en.COG#

[23] *See* U.S. Census Bureau, 2012 Census of Governments, Local Governments by Type and State: 2012 - United States-States.

(continued….)

"small government jurisdictions."[29]

11. *Wired Telecommunications Carriers*. The U.S. Census Bureau defines this industry as "establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband Internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry."[30] The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees.[31] U.S. Census data for 2012 show there were 3,117 firms that operated that year.[32] Of this total, 3,083 operated with fewer than 1,000 employees.[33] Thus, under this size standard, the majority of firms in this industry can be considered small.

12. *Cable Companies and Systems (Rate Regulation Standard)*. The Commission has developed its own small business size standards for cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide.[34] Industry data indicate that of 4,600 cable operators nationwide, all but nine are small under this size standard.[35] In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.[36] Industry data indicate that of 4,600 systems nationwide, 3,900 have fewer than 15,000 subscribers, based on the same records.[37] Thus, under this second size standard, the Commission believes that most cable systems are small.

13. *Cable System Operators*. The Act also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer

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https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=COG_2012_ORG02.US01&prodType=table. Local governmental jurisdictions are classified in two categories – General purpose (county, municipal, and town or township) and Special purpose (special districts and independent school districts).

[24] *See id*., County Governments by Population-Size Group and State: 2012 - United States-States. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=COG_2012_ORG06.US01&prodType=table. There were 2,114 county governments with populations of less than 50,000.

[25] *See id*., Subcounty General-Purpose Governments by Population-Size Group and State: 2012-United States-States. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=COG_2012_ORG07.US01&prodType=table. There were 18,811 municipal and 16,207 town/township governments with populations of less than 50,000.

[26] *See id*., Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=COG_2012_ORG11.US01&prodType=table. There were 12,184 independent school districts with enrollment populations of less than 50,000.

[27] *See id*., Special District Governments by Function and State: 2012 - United States-States. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=COG_2012_ORG09.US01&prodType=table. The U.S. Census Bureau data did not provide a population breakout for special district governments.

[28] *See id*., County Governments by Population-Size Group and State: 2012 - United States-States. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=COG_2012_ORG06.US01&prodType=table; Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States-States. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=COG_2012_ORG07.US01&prodType=table; and Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States. https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=COG_2012_ORG11.US01&prod

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than one-percent of all subscribers in the United States and is not affiliated with any; entity or entities whose gross annual revenues in the aggregate exceed $250,000."[38] There are approximately 52,403,705 cable subscribers in the United States today.[39] Accordingly, an operator serving fewer than 524,037 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total revenues of all its affiliates, do not exceed $250 million in the aggregate.[40] Based on the available data, we find that all but nine independent cable operators are affiliated with entities whose gross annual revenues exceed $250 million.[41] Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed $250 million, we note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million,[42] and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under the definition in the Communications Act.

14. *Open Video Services*. Open Video Service (OVS) systems provide subscription services[43] and the OVS framework is one of four statutorily recognized options for the provision of video programming services by local exchange carriers.[44] The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services, OVS falls within the SBA small business size standard covering cable services or "Wired Telecommunications Carriers."[45] The SBA has developed a small business size standard for this category which covers all such firms having 1,500 or fewer employees.[46] According to the 2012 U.S. Census, there were 3,117 firms considered Wired Telecommunications Carriers in 2012, of which 3,083 operated with fewer than 1,000 employees.[47] Based on these data, most of these firms can be considered small. In addition, we note that the Commission has certified approximately 45 OVS operators to serve 116 areas, although most of these operators are not yet providing service.[48] Broadband Service Providers (BSPs) are currently the only significant holders of OVS certifications or local OVS franchises.[49] At least

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Type=table. While U.S. Census Bureau data did not provide a population breakout for special district governments, if the population of less than 50,000 for this category of local government is consistent with the other types of local governments, the majority of the 38,266 special district governments have populations of less than 50,000.

[29] *Id*.

[30] *See* 13 CFR § 120.201. The U.S Census Bureau uses the NAICS code 517110 for the Wired Telecommunications Carrier category. *See* https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none.

[31] *Id*. § 201.121.

[32] *See* U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms: 2012*. (517110 Wired Telecommunications Carriers). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110.

[33] *Id*.

[34] 47 CFR § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of $100 million or less in annual revenues. *Implementations of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 (1995).

[35] The number of active, registered cable systems comes from the Commission's Cable Operations and Licensing System (COALS) database on August 15, 2015. *See* FCC, Cable Operations and Licensing Systems (COALS). www.fcc.gov/coals (last visited June 21, 2019).

[36] 47 CFR § 76.901(c).

[37] *See* FCC, Cable Operations and Licensing Systems (COALS). www.fcc.gov/coals.

one OVS operator, Affiliates of Residential Communications Network, Inc. (RCN), has sufficient revenues to ensure they do not qualify as a small business entity. However, the Commission does not have financial or employment information for the other entities which are not yet operational. Thus, the Commission concludes that up to 44 OVS operators (those remaining) could potentially qualify as small businesses that may be affected by the rules and policies adopted herein.

E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

15. The rules adopted in this Order will impose no additional reporting or recordkeeping requirements. We expect the compliance requirements—namely, modifying and renewing cable franchise agreements to comport with the law—will have only a *de minimis* effect on small entities. As ACA explains, "most franchising authorities understand the limits of their authority and do not impose unlawful requirements on [small cable operators]."[50] LFAs will continue to review and make decisions on applications for cable franchises as they already do, and any modifications to the local franchising process resulting from these rules will further streamline that process. The rules will streamline the local franchising process by providing guidance as to: the appropriate treatment of cable-related, in-kind contributions demanded by LFAs for purposes of the statutory five percent franchise fee cap, what constitutes "cable-related, in-kind contributions," and how such contributions are to be valued. The rules will also streamline the local franchising process by making clear that LFAs may not use their video franchising authority to regulate the provision of certain non-cable services offered over cable systems by incumbent cable operators. The same can be said of franchising at the state level. The rules will help streamline the franchising process by ensuring that applicable statutory provisions are interpreted uniformly throughout the country.

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[38] 47 U.S.C. § 543(m)(2). *See also* 47 CFR § 76.901(f).

[39] *See* SNL Kagan at https://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx.

[40] 47 CFR § 76.901(f); *See FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, 16 FCC Rcd 2225 (Cable Services Bur. 2001).

[41] *See* SNL Kagan at https://www.snl.com/interactivex/TopCableMSOs.aspx.

[42] The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission's rules.

[43] *See* 47 U.S.C. § 573.

[44] *Id*. § 571(a)(3)-(4). *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Thirteenth Annual Report, 24 FCC Rcd 542, 606, Para. 135 (2009) (*13th Annual Report*).

[45] 13 CFR § 201.121. The U.S Census Bureau uses the NAICS code 517110 for the Wired Telecommunications Carrier category. *See* https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none.

[46] *Id*.

[47] *See* U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series – Estab & Firm Size: Employment Size of Firms: 2012* (517110 Wired Telecommunications Carriers). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110.

[48] A list of OVS certifications may be found at https://www.fcc.gov/general/current-filings-certification-open-video-systems#block-menu-block-4.

[49] *See 13th Annual Report*, 24 FCC Rcd at 606-07, para. 135. BSPs are newer firms that are building state-of-the-art facilities-based networks to provide video, voice, and data services over a single network.

[50] Letter from Ross Lieberman, Senior Vice President, Government Affairs ACA Connects–America's Communications Association, to Marlene Dortch, Secretary, FCC, at 1 (July 25, 2019).

F. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered

16. The RFA requires an agency to describe any significant alternatives it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance, rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities."[51]

17. To the extent that these rules are matters of statutory interpretation, we find that the adopted rules are statutorily mandated and therefore no meaningful alternatives exist.[52] Moreover, as noted above, the rules are expected to have only a *de minimis* effect on small entities. The rules will also streamline the local franchising process by providing additional guidance to LFAs.

18. Treating cable-related, in-kind contributions as "franchise fees" subject to the statutory five percent franchise fee cap will benefit small cable operators by ensuring that LFAs do not circumvent the statutory five percent cap by demanding, for example, unlimited free or discounted services. This in turn will help to ensure that local franchising requirements do not deter small cable operators from investing in new services and facilities. Similarly, applying these rules at the state level helps to ensure that such deterrence does not come from state-level franchising requirements either. Finally, applying the Commission's mixed-use rule to all incumbent cable operators helps to ensure that all small cable operators may compete on a level playing field because incumbent cable operators will now be subject to the same rule that applies to competitive cable operators. We disagree with the City of Newton's argument that we should afford small entities six years to implement these changes—the issues that City of Newton raises are matters of statutory interpretation, and the Communications Act does not provide for the implementation period that the City of Newton requests.

G. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

19. None.

H. Report to Congress

20. The Commission will send a copy of the Report and Order, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act.[53] In addition, the Commission will send a copy of the Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. The Report and Order and FRFA (or summaries thereof) will also be published in the Federal Register.[54]

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[51] 5 U.S.C. § 603(c)(1)-(4).

[52] For this reason, we disagree with NATOA *et al*. that our actions will affect service to senior citizens, or to schools, libraries, and other public buildings and that this analysis is inadequate. *See* Letter from Joseph Van Eaton *et al*., Counsel to Anne Arundel County, *et al*. to Marlene H. Dortch, Secretary, FCC at 2 (July 24, 2019). This argument is essentially that the statutory cap does not afford local governments enough money to serve their constituents, and we do not have the authority to amend the statute.

[53] *See id*. § 801(a)(1)(A).

[54] *See id*. § 604(b).

STATEMENT OF
CHAIRMAN AJIT PAI

Re: *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992,* MB Docket No. 05-311.

As Scott Turow famously said in *One L: The Turbulent True Story of a First Year at Harvard Law School*, reading law is "something like stirring concrete with [your] eyelashes." And in few areas of law is the stirring more difficult than statutory interpretation. The canons of statutory construction are not plot points in John Grisham thrillers, and I doubt they will feature in next year's *Legally Blonde 3*. But as an agency charged with implementing the laws passed by Congress, statutory construction is fundamental to the Commission's work.

Thankfully, some issues of statutory interpretation are more straightforward than others. For example, today we decide that "in-kind" contributions made by cable operators for the non-capital costs of public, educational, and government (PEG) access channels count against the five percent cap on franchise fees set forth in Section 622 of the Communications Act (the Act).[1] I understand that many PEG operators are unhappy with this outcome. But it is the inevitable result of the statute passed by Congress.

Here's why. The statute plainly defines a "franchise fee" to include "*any* tax, fee, or assessment *of any kind*."[2] It then sets forth two exceptions to that definition related to PEG channels. For franchises in effect back in 1984, when the statute was passed, there is a broad exemption for "payments which are required by the franchise to be made by the cable operator during the term of such franchise for, or in support or the use of, public, educational, or government access facilities."[3] But for franchises granted later, the exemption is much narrower, covering only "capital costs which are required by the franchise to be incurred by the cable operator for public, educational, or governmental access facilities."[4]

This legal framework tells us two things. First, given these specific exemptions, the five percent cap (and associated franchise fee definition) does not include a general exemption from cable-related, in-kind contributions. Congress could have—but did not—create one. And the specific exemptions would be unnecessary if there were such a general exemption. The Supreme Court has made clear that it is "'reluctan[t] to treat statutory terms as surplusage' in any setting."[5] So are we.

Second, with respect to post-1984 franchises, capital costs are the only PEG costs that are exempt from the definition of franchise fees. Understandably, PEG operators and many local governments in this proceeding would like to benefit from the broader exclusion. But that's not what the statute says. The broader exemption by its plain terms only applies to franchises in existence back in 1984. Congress was clearly aware of the distinction between existing and post-1984 franchises when it established these exemptions, and we don't have the authority to rewrite the statute to expand the narrower, post-1984 one. This is Statutory Interpretation 101.

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[1] 47 U.S.C. § 542(b).

[2] 47 U.S.C. § 542(g)(1) (emphasis added).

[3] 47 U.S.C. § 542(g)(2)(B).

[4] 47 U.S.C. § 542(g)(2)(C).

[5] *Duncan v. Walker*, 533 U.S. 167, 174 (2001), quoting *Babbitt v. Sweet Home Chapter, Communities for Great Ore.*, 515 U.S. 687, 698 (1995).

To be sure, all of the issues of statutory construction addressed in this item aren't as easy as this one. But in each instance, we carefully parse the statute and arrive at the right result. For example, we correctly affirm that local franchising authorities (LFAs) may not regulate the provision of most non-cable services, including broadband Internet access service, offered over a cable system. And we find that the Act preempts any state or local regulation of a cable operator's non-cable services that would impose obligations on franchised cable operators beyond what Title VI of the Act allows. Obviously, some local governments that are eager to keep biting the regulatory apple object to this outcome. But the question of preemption is squarely addressed by the statute. Section 636(c) of the Act explicitly provides that "any provision of law of any State, political subdivision, or agency thereof, or franchising authority, or any provision of any franchise granted by such authority, which is inconsistent with this Act *shall* be deemed to be preempted and superseded."[6]

Now, let us suppose—and I know it seems improbable, but bear with me here—that some are not convinced by legal arguments and simply want to allow contributions the statute explicitly forbids, and permit regulations that it explicitly does not permit. The solution is simple: change the law. The job of administrative agencies like ours is not to rewrite laws set forth by Congress. It is to implement those laws. As the Supreme Court has opined, "[u]nder our system of government, Congress makes laws and the President, acting at times through agencies . . . , 'faithfully execute[s]' them. The power of executing the laws . . . does not include a power to revise clear statutory terms."[7]

Looking beyond the law, today's *Third Report and Order* is good for American consumers. That's because costs imposed by LFAs through in-kind contributions and fees imposed on broadband Internet access service get passed on to consumers. LFAs have not cracked the secret to a free lunch. Moreover, every dollar paid in excessive fees is a dollar that by definition cannot and will not be invested in upgrading and expanding networks. This discourages the deployment of new services like faster home broadband or better Wi-Fi or Internet of Things networks. So, by simply insisting that LFAs comply with the law, we will reduce costs for consumers and expedite the deployment of next-generation services. Good law *and* good policy.

Thank you to the dedicated staff who worked on this important item: from the Media Bureau, Michelle Carey, Martha Heller, Maria Mullarkey, Brendan Murray, Raelynn Remy, and Holly Saurer; and from the Office of General Counsel, Susan Aaron, Michael Carlson, Maureen Flood, Thomas Johnson, and Bill Richardson. When it comes to stirring the concrete of statutory construction, you bring a cement mixer to the task rather than eyelashes.

[6] 47 U.S.C. § 556(c) (emphasis added).

[7] *Utility Air Regulatory Group v. EPA*, 573 U.S. 302, 327 (2014).

STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY

Re: *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992,* MB Docket No. 05-311.

As I've stated many times since we began the media modernization effort, the video marketplace is changing dramatically, and each step we have taken to update anachronistic and clunky regulations makes it slightly easier for regulated industries to compete with their unregulated competitors. Though much work remains, I look forward to continuing the effort. At the same time, and as we see in the background of today's item, it is unsurprising that other stakeholders, such as franchise authorities, also feel their own pressures due to the changing market dynamics, whether budgetary or political. They too seek ways to either continue their past practices unabated or seek ways to maximize returns on their regulatory roles. However, Title VI of the Communications Act places important restraints on their reach, and unauthorized expansion of the statute is flatly wrong and must be held in check. The courts have agreed, and I am pleased that today we make strides toward answering the Sixth Circuit, by addressing three main areas raised in or affected by its remand.

First, the Order rightly counts cable-related "in-kind" contributions against the statutory cap. Failing to do so would effectively render the statute's restraints meaningless, or nearly so. Critics may argue that local franchise authorities have the weaker position when dealing at arm's length with video providers, but the record and experience show otherwise. There are numerous examples of where video providers lack the ability to say no to "voluntary" waivers of the five percent cap, having no recourse but to agree to all manner of in-kind contributions, ranging from providing all the necessary equipment to produce PEG programming in New York City, to supplying transport lines to cover ice cream socials in Minnesota. There are many examples in the record, but the point is: failure to agree to such terms could result in jeopardizing the franchise, and that is a risk many companies simply cannot afford to take. The Commission's role is to interpret and enforce the statute based on the record, and today we appropriately define cable-related in-kind contributions to prevent end-runs around the statutory cap.

Second, the Order also correctly preempts state-level franchise authorities who would seek to obliterate the statutory boundaries that are in place. Unfair and unreasonable fees and contributions beyond five percent of gross revenues for cable services conflict with the law, whether the franchisor is a state or local actor. The statute itself explicitly refuses to restrict states from exercising jurisdiction over cable services. In fact, about half of all states have authorized state-level franchise authorities. There is no good legal or policy reason for restraining the activities of local franchisors while allowing state authorities to continue unbounded, and I thank the Chairman for including this matter in the NPRM so that we could go to Order today on it.

Third, there are two issues regarding PEG contributions that could receive further attention as the record more fully develops. While I would have preferred a narrower definition of "capital costs," limiting such contributions to construction-related costs for PEG facilities, the item does acknowledge today that the current record has room to grow, leaving us the option to revisit this matter in the future. Similarly, we clearly acknowledge the need to resolve the PEG channel capacity cost question and expressly commit to doing so within the next year. This is a vital endeavor, so I thank the Chairman for working with me on this matter and look forward to the admittedly complex and rigorous undertaking.

Separately, and perhaps most significantly, the item properly rejects the ability of state or local governments to impose franchise fees on non-cable services. Inappropriate court determinations, such as the Eugene, Oregon, franchise case, have wrongly tried to open the door to the imposition of such fees on other services offered by what have traditionally been called cable operators. However, the statute is quite clear on the matter and the item appropriately clarifies that franchises authorities can only regulate

cable services. Today's action closes off potential revenues for franchise authorities from non-cable services, which is the right statutory reading. Further, allowing these entities to usurp the statute by imposing fees on the offering of broadband services would ignore the resulting harm to consumers. For instance, Congress has recognized multiple times that allowing governmental fees and taxes does affect Internet adoption rates. Given that almost everyone recognizes the importance of broadband availability, deterring its use would be at best, counterproductive. Moreover, without such a limitation, there appears to be no outer limit to the types of non-cable services for which a cable operator could be forced to pay fees. Today, it's broadband in the cross-hairs, but tomorrow it could be cloud services or over-the-top video services, for example.

Finally, I'll end with two points regarding the judicial and legislative implications of today's item. On the matter of applying today's Order to existing franchise agreements, I worry that we are punting too much of the burden to the overworked courts and would be better served by delineating a clear process under the Commission's purview. However, I support the efforts of my colleague Commissioner Carr to make Section 636 controlling, which will at a minimum provide a clearer starting point for negotiations. I would also note that I support my colleague's effort to clarify that the provisions of this Order cannot be waived. We will be closely watching to ensure that no franchise authorities seek to make an end run around the reforms contained in this Order by demanding that franchisees waive any of the provisions. Regarding the need for legislation, I hope that Congress will take note of our effort today and consider launching an ambitious, but much needed, review of Title VI in its entirety. We are bringing the regulations more in line with the statute today, but the whole ecosystem would be well-served by a wholesale rewrite of the statute and an acknowledgement of the current market realities.

But, this item shouldn't and won't be the end of our work to eliminate outdated rules and scale back inappropriate actions by state and local franchise authorities. For our media modernization initiative, I will be submitting soon a new round of ideas for the Chairman's consideration. On a larger scale, I am hard at work on a blog outlining the fundamental overhaul needed to address our outdated franchising regime and the need to further curtail "creatively harmful" efforts by franchise authorities.

I approve.

STATEMENT OF
COMMISSIONER BRENDAN CARR

Re: *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992,* MB Docket No. 05-311.

If you tax something, you get less of it. Yet politicians around the country have been treating Americans' cable and broadband bills as a piggy bank to line government coffers. Those illegal taxes only raise our costs, make it harder to access the Internet, and curb competition. Today, we vote to end this outlier conduct.

Doing so is not only required by federal law. It's the right thing to do. Policymakers at all levels of government should be making it easier and less expensive to build out broadband infrastructure. That is why this FCC has been eliminating regulatory costs and cutting red tape. It's so that next-gen networks can be built, increasing competition and choice.

Regulatory reform matters—and not just in some abstract or theoretical sense. We know it from our own experience.

Take this Commission's actions to get the government out of the way so the private sector can build 5G. We modernized the federal historic and environmental rules that apply to small cells. We addressed outlier conduct at the state and local level by tackling high fees and long delays in the permitting process. Combined, those two decisions cut about $3.6 billion in red tape that had slowed down broadband builds and limited competition.

In fact, those and other FCC reforms are already delivering results. Internet speeds are up nearly 40 percent. Americans saw more fiber broadband built to their homes last year than ever before. The number of small cells put up increased from 13,000 in 2017 to more than 60,000 in 2018. Investment in broadband networks is back on the rise. And the U.S. now has the world's largest 5G deployment.

We know the opportunity that broadband enables—from creating jobs to improving access to high-quality healthcare and education. That's why, as policymakers and regulators, we must always view broadband as an opportunity for consumers—not tax collectors.

That brings us to today's Order. Congress recognized decades ago that excessive taxes and in-kind demands, which have the same effect, could threaten innovative services and lead to higher prices. That's why Congress capped franchise fees at five percent of cable revenue. Congress wanted to encourage voice and Internet service offered over cable systems by shielding those services from taxes and regulations.

The Commission knows well that outlier fees and restrictions limit buildout. We saw that with small cells, where cities like New York and San Jose leveraged their monopolies over the rights of way to demand exorbitant fees and concessions wholly unrelated to the cost of rights of ways. And we're seeing a similar dynamic here with cable franchising.

Some local franchising authorities have taken advantage of their roles as regulators to force providers to offer free service to municipal liquor stores and government-owned golf courses. Others have imposed broadband and voice taxes on top of existing franchise fees. And others have required providers to obtain entirely separate franchises to provide Wi-Fi and cellular backhaul even though they're already authorized under existing franchise laws.

This abusive behavior has consequences. Money that could otherwise be spent on network

deployments and upgrades is instead diverted to the government's own pockets. Ultimately, consumers take the hit—whether it's a higher-priced cable bill or decreased investment and competition in their communities. An economic analysis in our record shows that without reform, illegal taxes will reduce consumer welfare by $40 billion by 2023.

So I'm glad we take these steps today to crack down on bad actors who seek to tax broadband and thus provide less access and competition for all of us. I'm also glad my colleagues agreed to some edits that have strengthened this item to further protect consumers from harm.

First, we now make clear that illegal franchise terms are *per se* preempted under the statute and by this Order, which will help bring franchises into compliance more quickly. Consumers shouldn't have to pay higher prices while protracted negotiations take place. Their cable bills should simply reflect the law. Second, we make clear that Wi-Fi and wireless services provided over the cable system are exempt from duplicative fees, which will encourage providers to invest more in these 5G-ready services. Third, we affirm that franchising authorities may not ask cable operators to voluntarily waive these regulatory reforms as a negotiating tactic or to perform an end-run around the statutory franchise fee cap. And finally, we ensure that in-kind contributions requested by franchise authorities are calculated at their fair market value, because consumers shouldn't have to pay more for cable services than the governments who represent them.

These and other edits I requested help ensure consumers are protected from higher prices and that more money is spent on the investments needed to bring more broadband to more Americans. So I want to thank my colleagues for expanding the relief that we provide in this decision. I also want to thank the Media Bureau for its work on the item. It has my support.

STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL,
DISSENTING

Re: *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992,* MB Docket No. 05-311.

Do just a bit of research on the state of local journalism in this country and you will see stark headlines with words like "decline," "shrink," and "crisis."

These headlines are not fake news. According to the Associated Press, more than 1,400 cities and towns across the United States have lost a newspaper during the last decade and a half. This trend extends beyond newspapers. Over roughly the last decade, newsroom employment—the reporters, editors, photographers, and videographers who work day-in and day-out to publish, broadcast, and report local news in this country have declined by 25 percent.

This downsizing deserves attention. While national news is on many of our screens, local journalism is disappearing. This has consequences. The loss of a local outlet means there is no one to report on the day's events. Coverage of the school board doesn't take place. Highlights from the local football game go unreported. Investigations into property assessments and local corruption fall by the wayside. But these are the facts that keep us informed as citizens and provide us with the news we need to help make decisions about our lives, our communities, and our democracy.

I think this context matters—and this context is important for today's decision. Because this agency should seize opportunities to reinvigorate local newsgathering and community coverage. In fact, that has traditionally been a hallmark of Federal Communications Commission media policy. But on that score, today's decision misses the mark. That's because it cuts at public, educational, and governmental channels across the country. It goes beyond placing reasonable limits on contributions subject to the statutory franchise fee and jeopardizes the day-to-day costs, like staff and overhead, required to run such stations.

I'm not the only one with this concern. Take a look at the record. We've heard from thousands of communities across the country worried we are cutting the operations of so many local channels. I am saddened that this agency refuses to listen.

I think their pleas fell on deaf ears because this agency has convinced itself that by making these changes, we will see more broadband. They insist that funding these local stations and related efforts damages the ability of our nation's broadband providers to extend their networks to communities without high-speed service. But comb through the text of this decision. You will not find a single commitment made to providing more broadband service in remote communities. There is no enforceable obligation to expand broadband capacity. There is no agreement that any savings from today's action is pushed into new network deployment. I fear this absence speaks volumes.

That's because in the final analysis, this decision is part of a broader trend at this agency. Washington is cutting local authorities out of the picture when it comes to infrastructure. You see it here, in the way we limit local public, educational, and governmental channels and public safety services like I-Nets. You see it in the way we cut local officials out of decisions about wireless facilities deployed in their own backyards. You see it the way that just last month we preempted a local law designed to increase broadband competition in a city where residents were crying out for more choices for internet access.

I don't think this is the way to govern. I believe the way we are proceeding is at odds with our

long legal history and tradition of dual sovereignty in the United States. I think instead of speeding our way to the digital future, it is slowing us down, increasing our division and diminishing the dignity of local institutions. I dissent.

STATEMENT OF
COMMISSIONER GEOFFREY STARKS,
DISSENTING

Re: *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992,* MB Docket No. 05-311.

One of our primary responsibilities at the Commission is to ensure that spectrum, a scarce public resource that underscores our broadcasting industry and our wireless communications, is distributed equitably and in the public interest. However, spectrum is not the only public resource integral to the deployment of our communications networks. Access to public real estate and property is similarly critical. Specifically, public rights-of-way managed by states and municipalities fuel the build-out of our networks. Providers need access to this resource to dig trenches to lay conduit and reach homes.

For many decades, state, municipal, or local governing bodies have been recognized as the arbiters of the use of this valuable public resource. This recognition formed the basis of the Cable Act,[1] which spawned our local franchising rules and allowed providers to come freely to local franchising authorities to negotiate the use of public rights-of-way. Historically, LFAs have sought and cable providers have agreed to a fee for the use of this public property, along with other public interest terms. In return, providers have been able to run profitable businesses, acquiring new customers and reaping hundreds of billions of dollars in revenue.

I dissent from today's item because it threatens the ability of states and municipalities to manage their local affairs through an improper reading of the statute. The expansive and unprecedented reading of the term "franchise fee" in today's item significantly devalues the use of public rights-of-way and could, within months, threaten settled and longstanding franchise agreements across the country. In doing so, it puts at risk the careful balance developed over many decades between the interests of providers and the local communities that they serve.

Thousands of federal, state, and local leaders have submitted substantive comments in our docket, pointing out how our action today will frustrate other important goals of the statute, and target certain terms negotiated into franchise agreements that are of great importance to local communities.[2] From free or discounted services to schools or government buildings, to institutional networks, or I-Nets, which are viewed as critical infrastructure by many cities and relied upon to support government functions and public safety communications, much is at stake. Additionally, the item itself recognizes that it will shake the very foundation of another statutory priority, the provision of public, educational, or governmental, or PEG, stations, which the item notes provide critical and unique local service to communities across the country.[3]

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[1] Cable Communications Policy Act of 1984, Pub. L. No. 98-549, 98 Stat. 2779 (1984).

[2] *See, e.g.*, Letter from Sen. E. Markey *et al.*, to Ajit Pai, Chairman, FCC (July 29, 2019); Letter from Sen. K. Gillibrand and Sen. C. Schumer, to Ajit Pai, Chairman, FCC (July 25, 2019); Letter from Sen. C. Van Hollen, to Ajit Pai, Chairman, FCC (June 12, 2019); Letter from Rep. Y. Clarke, to Ajit Pai, Chairman, FCC (May 9, 2019); Letter from Sen. M. Hirono, to Ajit Pai, Chairman, FCC (Dec. 18, 2018); Letter from Rep. G. Moore, to Ajit Pai, Chairman, FCC, at 2 (Dec. 14, 2018); Letter from Rep. E. Engel, to Ajit Pai, Chairman, FCC (Dec. 13, 2018); Reply Comments of CAPA et al. at 9; Comments of King County, Washington, at 9; City Coalition Comments at 17-18; Comments of NATOA *et al*. at 10.

[3] *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992,* MB Docket No. 05-311, Draft Third Report and Order, para. 50 (adopted Aug. 1, 2019) (*Third Report and Order*).

Perhaps the most significant departure in today's item is the expansive new reading of the term "franchise fee" for the purposes of the statutory cap on LFAs' collection of such fees. The term will now broadly include "cable-related, in-kind contributions."[4] This new interpretation of the statute will upend decades of settled regulatory determinations and innumerable franchise agreements currently in place across the country, and cause a seismic shift in the relationship between LFAs and providers, maximizing providers' leverage and minimizing the ability of LFAs to secure adequate service to their local communities.

The Commission's unilateral decision to avoid the words and intent of our statute and expand the definition of "franchise fee" in this proceeding is puzzling. As numerous commenters have extensively noted, and I agree, our mandate seems clear.[5] Section 622 of the Act caps franchise fees at five percent of a cable operator's gross revenues from the provisioning of cable services.[6] The term "franchise fee" is given a relatively straightforward definition in the statute: "any tax, fee, or assessment of any kind."[7] And, if the plain meaning of the words used raised any question about whether we are talking about money or some other type of contribution, the legislative history included a strikingly clear clarification: "[i]n general, this section defines as a franchise fee only monetary payments made by the cable operator and does not include as a 'fee' any franchise requirements for the provision of services, facilities or equipment."[8] On this issue, it is exceedingly clear – we are talking about money.

It is true that the Sixth Circuit returned this issue to us on procedural grounds with dicta considering whether the term "franchise fee" can include "noncash exactions" in narrow instances.[9] However, in almost the same breath the Court noted, notwithstanding its brief exploration of the definitions of the words at issue, "[t]hat the term 'franchise fee' can include noncash exactions, of course, does not mean that it necessarily *does* include every one of them."[10] The item's reliance on that brief discussion to support today's line-drawing exercise, in the face of a clearly worded statute and clearly stated congressional intent, is inappropriate.[11]

What does this really mean for communities across the country? It means that freely negotiated franchise terms, agreed to by cable providers in addition to franchise fees, in arm's length negotiations with LFAs all across the country, will almost immediately be treated differently now than they have for 35 years. And as a result, the value of local public rights-of-way will be immediately diminished limiting the ability of local authorities to raise revenue and support important programs. At its core, this means that difficult choices will need to be made by local leaders, contrary to the public interest, due to the Commission's misreading of the statute. For instance:

- The City of Medford, Massachusetts told us that they will need to decide whether to "divert resources away from core municipal and school services to maintain existing PEG programming,

[4] *Third Report and Order* at paras. 13-15.

[5] *See, e.g.,* NATOA *et al*. July 24, 2019 *Ex Parte* at 2; Anne Arundel County *et al*. July 24, 2019 *Ex Parte* at 8; Comments of City of Philadelphia *et al*. at 22 (Nov. 14, 2018); Comments of Charles County, Maryland, at 7 (Nov. 14, 2018); Reply Comments of Anne Arundel County, Maryland *et al*., at 6 (Dec. 14, 2018).

[6] 47 U.S.C. § 542.

[7] *Id.* § 542(g)(1).

[8] 1984 U.S.C.C.A.N. 4751, 4753; H.R. Rep. No. 98-934 at 65 (1984) (emphasis added).

[9] *Montgomery County, Md. et al. v. FCC*, 863 F.3d 485, 490-91 (6th Cir. 2017).

[10] *Id.* (emphasis in original).

[11] *Id.*

suffer a dramatic reduction in the scope of PEG channels, or lose them altogether."[12]

- Durango, Colorado worries that reductions in funding will likely mean its PEG channels will be cut altogether, leaving the city without a way to warn citizens when a disaster strikes. PEG channels were used to alert citizens when 3 million gallons of mining sludge leaked into a major river which flows through the middle of the town. A PEG station's drone was used to obtain video and track the progress of the spill by local emergency management officials. Later, PEG channels were used to advise of evacuations and road closures when a massive wildfire broke out nine miles north of the city. Reductions in funding will likely mean PEG channels will be cut all together, leaving the city without a way to warn citizens when a disaster strikes.[13]
- I was in New York City earlier this week meeting with city officials and was told that they worry greatly about the impact of today's item on the future of the city's I-Net, a network that has become so integral to city services that it will be nearly impossible to replace. FDNY uses the I-Net for "critical public safety communications" among other things, and every city agency is plugged into it in some fashion.[14]

Our record is clear: the services negotiated in local franchising agreements are incredibly important, and reflect the significant value associated with permission to use public rights-of-way. When it comes to PEG channels, I can't say it any better than the item already does: "A significant number of comments in the record stressed [the benefits of PEG stations], which include providing access to the legislative process of the local governments, reporting on local issues, providing a forum for local candidates for office, and providing a platform for local communities—including minority communities."[15] Free or discounted service to cash-strapped schools, provision of critical I-Nets, discounts to vulnerable communities – all of these franchise terms advance the public interest and are a small imposition given the value received by providers in franchise negotiations. Our action today is unnecessary, unsupported by law or precedent, and risks causing grave harm to local communities.

In short, today's item jeopardizes the public interest and threatens to significantly alter the ability of state and local governments to determine how best to serve their communities. This item will undoubtedly end up back in litigation, and I believe the court will find that the majority's decision is at odds with clear congressional direction. I dissent.

[12] Letter from Stephanie M. Burke, Mayor, City of Medford, MA, to Ajit Pai, Chairman, FCC (July 25, 2019).

[13] Association of Washington Cities *et al.* April 3, 2019 *Ex Parte*.

[14] City of New York July 25, 2019 *Ex Parte* at 1.

[15] *Third Report and Order* at para 50.

Attachment—Additional Questions for the Record

Subcommittee on Communications and Technology
Hearing on
"Our Wireless Future: Building A Comprehensive Approach to Spectrum Policy"
July 16, 2019

Mr. Julius P. Knapp, Chief, Office of Engineering and Technology, Federal Communications Commission

The Honorable Jerry McNerney (D-CA) & the Honorable Robert E. Latta (R-OH)

1. As Co-Chairs of the Congressional Wi-Fi Caucus, we are interested in ensuring that the FCC leverages the current opportunity afforded by the 6 GHz NPRM to dedicate significant contiguous spectrum to unlicensed use. Considering the consumer benefits that continue to flow from unlicensed Wi-Fi technology, we are concerned that even more spectrum is needed. With this consideration in mind, please answer the following questions:

    a. In 2003, the FCC made a meaningful addition to 5 GHz spectrum access by allowing Wi-Fi use of the 5.47-5.75 GHz band subject to certain conditions. Please detail what other spectrum bands have been made available since 2003 for unlicensed Wi-Fi use.

Response: The Commission has taken a number of actions since 2003 to make additional spectrum for unlicensed use. Importantly, the Commission does not generally identify spectrum for any particular technology. It is up to industry to decide whether to develop standards for Wi-Fi in any particular spectrum band that is available for unlicensed use.

In 2012 the Commission made spectrum available for unlicensed devices operating the white spaces in the TV broadcast bands. These rules were updated earlier this year and we anticipate the Commission will soon propose further steps to improve these rules, particularly for use in rural areas and for the Internet of Things. Thus far industry has not developed standards for Wi-Fi in this spectrum.

In 2014 the Commission removed the indoor use restriction on unlicensed use of the 5150 – 5250 MHz band and increased the power. As a result, this band has become much more heavily used for Wi-Fi.

In 2016, the Commission adopted rules creating a 14 GHz wide block of spectrum for unlicensed use at 57 – 71 GHz. The Wi-Fi standard now covers this band.

In 2018 the Commission finalized its rules for the Citizen's Broadband Radio Service in the 3550 – 3700 MHz band that combined elements of our rules for licensed and unlicensed use. Thus far no Wi-Fi standard has been developed for this band.

Earlier this year the Commission adopted rules to provide 21.2 GHz of spectrum for unlicensed use in several bands above 95 GHz, specifically, the 116 – 123 GHz, 174.8 – 182 GHz, 185 – 190 GHz and 244 – 246 GHz bands. While we are unaware of any activity to develop a Wi-Fi standard for this spectrum, keep in mind that the original Wi-Fi standard was not developed until a dozen years after the spectrum was first made available. Late last year the Commission proposed to make an additional 1.2 GHz of unlicensed spectrum in the 6 GHz band (5.925-7.125 GHz). This spectrum would double the amount of Wi-Fi spectrum currently available in the mid-band. This spectrum is used for point-to-point microwave services that support utilities, public safety and commercial wireless backhaul, as well as several other services. These communities have expressed strong concerns about potential interference. The technical issues are quite complex, but I can assure you that our engineering staff is working hard to develop a path forward.

b. In addition to the 6 GHz band, is the FCC considering any other bands for potential unlicensed Wi-Fi use? If so, please note which bands and the status of the review for each of these bands.

Response: Unlicensed devices share spectrum with incumbent services on a non-interference basis. As reflected in our current proceedings at 5.9 GHz and 6 GHz, this requires development of techniques to ensure that harmful interference will not occur. Several other elements factor into whether a particular frequency band is suitable for Wi-Fi, including the technical characteristics of the spectrum itself, available bandwidth, viability of the sharing techniques, impact of any constraints, proximity to existing bands used for Wi-Fi that may affect equipment designs and costs, etc. Industry is in the best position to evaluate these considerations and thus far has not identified any other spectrum bands that are suitable for Wi-Fi. Nevertheless, we will continue to consider such opportunities as the Commission has done throughout its past.

Attachment—Additional Questions for the Record

Mr. Julius P. Knapp, Chief, Office of Engineering and Technology, Federal Communications Commission

The Honorable Tom O'Halleran (D-AZ)

1. Mr. Knapp, in the GAO's recent report ["*FCC Should Undertake Efforts to Better Promote Tribal Access to Spectrum*"], they conclude that "the FCC's efforts to promote and support tribal entities' access to spectrum have done little to increase tribal use of spectrum, as only very few tribes are accessing spectrum to be able to provide internet service."

    a. What further actions are needed by the Commission or Congress to better enable tribes to access valuable spectrum resources?

Response: Tribal Nations face unique and significant obstacles to offering service in rural Tribal areas, even when compared to rural non-Tribal lands. The Commission recognizes the need to work in close collaboration with Tribal Nations as well as non-Tribal stakeholders. Making mid-band spectrum available for advanced wireless services, including 5G, provides a critical opportunity to address the need for wireless broadband in rural and Tribal areas. Mid-band spectrum offers a desirable combination of coverage and capacity for wireless services. Under Chairman Pai's leadership, the Commission has sought not only to make mid-band spectrum available for 5G generally, but also to identify specific opportunities for rural Tribal Nations to obtain access to this spectrum with a special early-access priority window.

2. Mr. Knapp, under the MOBILE NOW Act signed into law last Congress, NTIA and the FCC are directed to consider "the importance of deployment of wireless broadband services in rural areas" when identifying a total of 255 MEGAHERTZ of spectrum to become available for wireless use.

    a. In making 255 MEGAHERTZ of spectrum available, what measures does the Commission (in consultation with NTIA) plan to implement to assist rural and underserved communities in gaining access to this spectrum once it becomes available?

Response: The Commission is committed to ensuring that consumers in rural and underserved areas have access to the wireless broadband services. Several recent and upcoming spectrum auctions, including Auction 101 (28 GHz band), Auction 102 (24 GHz band), Auction 103 (37, 39, and 47 GHz bands), and Auction 105 (3.5 GHz band), have included bidding credits designed to encourage participation by rural service providers and small businesses. In the upcoming 3.5 GHz auction, providers that serve fewer than 250,000 subscribers in primarily rural areas will be eligible for a 15% bidding credit up to $10 million.

In July 2019, the Commission adopted a *Report and Order* that transforms the regulatory framework governing the 2.5 GHz band with an emphasis on spurring the deployment of 5G services in rural and Tribal areas. Spectrum in the 2.5 GHz band has been underutilized in many rural areas and the reforms adopted by the Commission aim to quickly reassign that spectrum to providers that will use it to serve rural consumers. The *Report and Order* establishes a priority filing window for rural Tribal Nations to obtain unassigned 2.5 GHz spectrum licenses to improve access to wireless broadband on Tribal lands. The Wireless Telecommunications Bureau and Office of Native Affairs and Policy are conducting extensive outreach to Tribes to inform them of the priority window and support Tribes that pursue licenses. FCC staff gave presentations on the 2.5 GHz band and the upcoming priority window at the August 2019 Tribal Workshop in Billings, MT, and the September 2019 National Broadband Summit in Washington, DC, and will be conducting further workshops in the months leading up to the priority window.

The Commission also has two ongoing proceedings that will make valuable spectrum available for use in rural areas. Specifically, the Commission proposed to make some or all of the spectrum between 3700 MHz and 4200 MHz available for licensed use by repurposing satellite C-band spectrum. This mid-band spectrum is suitable for providing service in rural areas, particularly in combination with lower frequency bands. The Commission also proposed to make 1.2 GHz of spectrum available for unlicensed used in the 5925 – 7125 MHz band. As is the case with unlicensed spectrum generally, it would be available for use in rural areas. I should add that, in addition I anticipate the Commission will consider proposals to improve our rules for TV White Spaces to make them better suited for service in rural areas.

3. Mr. Knapp, at the July FCC Commissioner's Meeting, the FCC voted on a report and order reforming the EBS Spectrum Band. Part of this order gave a priority filing window for eligible, federally-recognized tribal governments tribal communications providers. I understand there will be a 90-day tribal outreach period followed by a 60-day application window.

    a. Could you comment on whether this is a sufficient allocation of time- 90-days for tribal outreach and 60-day application windows, respectively- for tribes in advance of this spectrum auction? Were longer outreach and application windows considered?

Response: The 2.5 GHz band Tribal priority window will put prime mid-band spectrum into the hands of Tribal Nations and entities to enable broadband deployment to rural Tribal areas. In the 2.5 GHz NPRM we sought comment on tribal priority window application procedures, including the length of time for outreach and for the application window. Several (6) Tribal entities proposed a 90-day notice period and 60-day filing period. The Order directs the FCC's Wireless Telecommunications Bureau to announce procedures through a public notice, consistent with our process for bidding procedures.

U.S. Senate Committee on Appropriations
Subcommittee on Financial Services and General Government

Questions for the Record from Senator Steve Daines:

Question 1: Chairman Pai, great to have you here to update us on the work the FCC is doing to expedite moving spectrum into the marketplace for 5G and broadband expansion. This is a topic we have discussed before and you know better than most the importance of clearing more spectrum, especially in the mid-band, for 5G technology. The U.S. cannot afford to lose the race to 5G to China or any other country. 5G, like 4G, will open up a whole new digital economy, and making sure the U.S. is leading should be a top priority for all of us here today. What more do you need from congress to help you expedite getting more spectrum into the marketplace so the U.S. can continue to lead in 5G deployment?

Response: Securing American leadership in 5G is a national priority. That's why the FCC has been pursuing a strategy to Facilitate America's Superiority in 5G Technology—the 5G FAST Plan. By executing that plan, the Commission has already made an unprecedented amount of spectrum available for commercial, flexible wireless use, promoted wireless infrastructure, and modernized regulations to encourage fiber deployment. We appreciate the authority that Congress has granted us to pursue the 5G FAST Plan, including the authority to repurpose spectrum for 5G use. We will work with the Congress and this Committee if and when any resource issues arise.

Question 2: Chairman Pai, one of the bands for 5G that I have been very active on is the C-Band, including writing you a letter on it in July. I want to stress the importance of getting this spectrum out to the market quickly. We cannot wait five plus years for it to be available. But I also want to make sure that we don't steam roll Montana's rural communities in the process or push out current incumbents. I believe any auction of the C-Band should be open and transparent, allowing for both our small, rural companies to participate as well as our national carriers. If only one company or a small number of carriers have access to this spectrum then rural Montana will be left behind again. Can you commit to me that you will find a solution that is open and transparent, protects [C-Band] incumbents, and has real benefits for our rural communities?

Response: Promoting broadband access in rural communities and closing the digital divide is one of the Commission's top priorities, and mid-band spectrum will play a major role in achieving this. Making additional mid-band spectrum available offers incalculable benefits to the American public, including promoting job growth, increasing access to health care and education, and modernizing infrastructure in the United States.

I am pleased to report that on February 28, 2020, the Commission adopted rules to make 280 megahertz of C-band spectrum available through an FCC-led auction. C-band spectrum is widely seen as a critical swath of mid-band spectrum that could help drive American leadership in 5G, the next generation of wireless connectivity. This spectrum offers both geographic coverage and the capacity to transmit large amounts of data—a combination that is appealing to entrepreneurs and wireless consumers alike.

The decision meets each of the four priorities I've identified in this proceeding. It frees up a significant amount of C-band spectrum for 5G. It does so quickly. It generates revenue for the U.S. Treasury. And it protects the services that are currently delivered using this spectrum. The Commission will commence an auction later this year—on December 8. I believe that a public auction, run by our outstanding staff here at the FCC, is the best way to ensure that we assign this spectrum in a fair, trusted, and transparent manner. The Commission has a quarter-century track record of designing and implementing open and transparent spectrum auctions to promote the development and deployment of new technologies in all areas of the United States, including in rural areas.

The Order establishes bidding credits for smaller entities and rural service providers to facilitate their participation in the auction and will, in turn, increase the availability of 5G service in rural areas. The item also adopts Partial Economic Areas (PEAs) as the geographic license area for the new flexible-use licenses. The Commission has found that using PEAs—a smaller license area than some may have wanted—encourages auction participation by a diverse group of buyers and generates competition among large, regional, and small carriers across various geographic areas.

The item is a win for innovators who want to introduce new services in the C-band. It is a win for incumbents who will be fairly compensated during this transition. And, most importantly, it is a win for the American people, including those in rural America, who will enjoy the rollout of new 5G services.

Question 3: Chairman Pai, as you know spectrum has many different uses. It can be used for fixed-wireless broadband, WiFi systems, 5G, public safety, cable and broadcast television, and so much more. Balancing these uses can be tricky especially when dealing with unlicensed spectrum. The 6 GHz band is one of those tricky bands where we are looking to expand unlicensed use while simultaneously protecting current uses. Are you optimistic that the FCC will be able to successfully protect incumbents while also expanding uses in this band?

Response: I have consistently stated that the Commission is committed to protecting incumbent systems in the 6 GHz band from harmful interference. The Commission's technical experts in our Office of Engineering and Technology have spent considerable time reviewing the substantial record that has been compiled in this proceeding and meeting with interested stakeholders. The record reflects several detailed technical studies and analyses relating to the potential impact of unlicensed use on incumbent use of the 6 GHz band and technical and operational methods to mitigate harmful interference. Our Office of Engineering and Technology has been evaluating a variety of issues, such as indoor and outdoor use cases and a variety of power levels, to discern whether and to what extent unlicensed operations can exist alongside incumbent uses. I can assure you that the Commission's ultimate decision will be grounded in sound engineering analysis. And I remain optimistic that we will be able to develop a set of technical rules that will both safeguard incumbent users and allow for unlicensed operations throughout the band.

Question 4: Chairman Pai, Montana is a big state, with populations spread all over. What we have found is that some companies, sometimes unknowingly, sometimes intentionally, will buy

spectrum and only build out in high-populated areas, missing our rural communities. I believe it is important that when building the rules for spectrum auctions that we focus on the needs of rural America. Buildout requirements that focus on meeting specific population goals or rules that disincentive subleasing or sharing spectrum hurt rural Montana. What can the FCC do to better prioritize rural Montana when creating its build out requirements and other rules during spectrum auctions?

Response: My top priority has been to ensure that we close the digital divide so that every American, including those living in rural areas, enjoys the benefits of 5G and other advanced wireless services, and I have taken several key steps to fulfill that goal.

First, I have supported the adoption of robust construction requirements in all the bands that the Commission has made available during my tenure. Buildout or construction requirements have functioned as a core part of the Commission's wireless policy for decades. Such requirements are an important tool for ensuring that spectrum does not lie fallow and that new services are built out to businesses and consumers. The Commission, when establishing construction requirements for spectrum, considers a variety of factors to encourage deployment, particularly in rural areas. We carefully consider various characteristics of a spectrum band, including the availability of equipment, before we establish construction requirements, and we generally seek public comment on construction timeframes.

Second, I have supported the adoption of appropriate license area sizes to ensure that small or rural providers have opportunities to serve rural areas; for example, in the 3.5 GHz band, I supported the adoption of counties as the geographic license area, which is the smallest license area size that the Commission has auctioned. These providers are likely to be focused on building out aggressively in the areas in which they have obtained a license from the Commission.

Third, I have ensured the adoption of bidding credits in many of our auctions to create additional opportunities for small businesses, rural service providers, and entities that serve Tribal lands.

And *finally*, I have recognized that in some cases, the private sector alone cannot create a business case for serving rural, sparsely populated areas. Those are cases in which the FCC can and should help. In particular, the FCC must take decisive action to target Universal Service Fund support to rural America. That's why I will be proposing the creation of the 5G Fund to deliver $9 billion to facilitate the 5G deployment in rural America, including $1 billion that is specifically set aside of precision agriculture needs.

Questions for the Record from Senator Richard J. Durbin:

Chairman Pai, you and I share a concern for closing the digital divide. I recently introduced a bill that would help to accomplish this goal, the *Promoting Access to Broadband Act*. This legislation would award grants to states to increase awareness of, and enrollment in, the Federal Communications Commission's (FCC) Lifeline program. Although 50 percent of non-broadband users cite cost as a reason they do not have broadband at home, the Lifeline program had just a 28 percent participation rate in 2017. I am very concerned that current proposals being considered by the FCC will decrease enrollment even further and make it more difficult for low-income Americans to afford telecommunications services. Rather than moving forward with harmful proposals such as capping the Universal Service Fund or establishing lifetime caps on benefits, I believe we should be focused on expanding access to the Lifeline program.

Question 1: Do you agree that we should increase enrollment in the Lifeline program to benefit more low-income Americans, and will you support my proposal to help states increase enrollment?

Response: The Commission's top priority is closing the digital divide and bringing the benefits of the Internet age to all Americans, including low-income Americans. I agree that additional consumer outreach can help inform consumers of the options they have for affordable broadband, both through the federal Lifeline program and through private efforts such as the Connect2Compete initiative.

Question 2: What actions can the Commission take to boost enrollment in the Lifeline program?

Response: The Commission has taken a number of steps to inform qualifying low-income consumers about the Lifeline program and facilitate enrollment. For example, the Universal Service Administrative Company, which administers the Lifeline program, provides consumers with information on how they can (1) qualify for Lifeline benefits; (2) enroll in the program; and (3) find service providers in their area. Additionally, USAC offers educational materials on its website that consumer advocacy groups, social service agencies, and other organizations that support Lifeline-eligible consumers can distribute in their communities. And the National Verifier offers a consumer-friendly system for prospective Lifeline subscribers to check their eligibility and enroll in the Lifeline program without having to rely on a Lifeline carrier. In particular, a consumer web portal enables Lifeline applicants to check eligibility directly with the National Verifier—a process that usually takes only a few minutes—and then receive a list of participating Lifeline carriers in their area from which they can choose.

Questions for the Record from Senator Joe Manchin III:

Question 1: C-BAND Auction
I am aware that there is an alternative plan to the private auction being considered by the FCC that would free up even more spectrum by using the proceeds from a transparent, public auction to build out fiber to provide high-speed broadband to unserved rural areas. This seems much more reasonable to me.

- How do you intend to ensure that small carriers and rural areas are not left behind in the upcoming auction?

Response: Promoting broadband access in rural communities and closing the digital divide is one of the Commission's top priorities, and mid-band spectrum will play a major role in achieving this. Making additional mid-band spectrum available offers incalculable benefits to the American public, including promoting job growth, increasing access to health care and education, and modernizing infrastructure in the United States.

I am pleased to report that on February 28, 2020, the Commission adopted rules to make 280 megahertz of C-band spectrum available through an FCC-led auction. C-band spectrum is widely seen as a critical swath of mid-band spectrum that could help drive American leadership in 5G, the next generation of wireless connectivity. This spectrum offers both geographic coverage and the capacity to transmit large amounts of data—a combination that is appealing to entrepreneurs and wireless consumers alike.

The decision meets each of the four priorities I've identified in this proceeding. It frees up a significant amount of C-band spectrum for 5G. It does so quickly. It generates revenue for the U.S. Treasury. And it protects the services that are currently delivered using this spectrum. The Commission will commence an auction later this year—on December 8. I believe that a public auction, run by our outstanding staff here at the FCC, is the best way to ensure that we assign this spectrum in a fair, trusted, and transparent manner. The Commission has a quarter-century track record of designing and implementing open and transparent spectrum auctions to promote the development and deployment of new technologies in all areas of the United States, including in rural areas.

The Order establishes bidding credits for smaller entities and rural service providers to facilitate their participation in the auction and will, in turn, increase the availability of 5G service in rural areas. The item also adopts Partial Economic Areas (PEAs) as the geographic license area for the new flexible-use licenses. The Commission has found that using PEAs—a smaller license area than some may have wanted—encourages auction participation by a diverse group of buyers and generates competition among large, regional, and small carriers across various geographic areas.

The item is a win for innovators who want to introduce new services in the C-band. It is a win for incumbents who will be fairly compensated during this transition. And, most importantly, it is a win for the American people, including those in rural America, who will enjoy the rollout of new 5G services.

Question 2: Allowing Consumers to Challenge FCC Maps
I have been providing you with real coverage data from people on the ground in West Virginia and a brief description of the challenges they face personally, professionally, and economically as a result of their unreliable broadband service. To this day, I have sent 25 individual letters that highlight the challenges that hard working West Virginians are facing daily.

- Are you finding the data that we are sending to be useful and beneficial for updating broadband coverage maps?
- When can the public expect to see a process in which they can directly send the data included in these letters directly to the FCC?
- What additional data would you require to ensure that these letters are providing the information you need to update and create accurate broadband maps?

Response: I appreciate all feedback on our data collection efforts. Knowing which Americans have access to broadband and which do not is critically important to the Commission. That's why last August the Commission adopted the Digital Opportunity Data Collection Report and Order and Notice of Proposed Rulemaking. The Report and Order departs from the census block-level reporting that the Commission adopted in 2013, and will instead collect granular, precise data about broadband service availability.

For fixed broadband, providers will be required to submit polygons depicting their actual service footprints or coverage areas using technical reporting standards developed by our staff. For mobile broadband, the Commission sought comment on using standardized radio frequency propagation prediction and standardized coverage maps for mobile services. The Commission also sought comment on ways to verify carrier data with on-the-ground data, such as stationary and drive testing, to ensure the quality of mobile broadband deployment maps.

To further ensure that these new granular broadband service availability maps accurately reflect the facts on the ground, the Universal Service Administrative Company is developing a portal for direct input from state, local, and Tribal governments, along with members of the public, on the map's accuracy. The Commission sought comment on how to best collect that feedback and incorporate it into the map. It also sought comment on the kinds of data that individuals and entities wishing to dispute the map should submit, such as the speeds offered at the consumer's location and the speed the at which the consumer is currently subscribed.

Question 3: **6 Gigahertz (GHz) Band**
Last year, your agency announced that it was considering a proposal to open up 1,200 megahertz of spectrum in the 6 GHz band for different types of unlicensed use. This band is utilized for microwave services that support utilities, public safety, and wireless backhaul. I strongly believe we must ensure that incumbent users are protected before there are any changes in any band of spectrum and I am concerned that there has not been enough testing of the proposed Automatic Frequency Coordination (AFC) mitigation technology or meaningful conversations with relevant federal agencies like FERC to ensure this proposal will not negatively impact the incumbent users.

- What assurance can you give me that incumbents that utilize this band will not be harmed if this proposal moves forward?
- Have you or your staff discussed this proposal with FERC?

- Can you commit to further test the AFC technology in consultation with FERC before moving forward with the proposal?

Response: I have consistently stated that the Commission is committed to protecting incumbent systems in the 6 GHz band from harmful interference. The Commission's technical experts in our Office of Engineering and Technology have spent considerable time reviewing the substantial record that has been compiled in this proceeding and meeting with interested stakeholders. The record reflects several detailed technical studies and analyses relating to the potential impact of unlicensed use on incumbent use of the 6 GHz band and technical and operational methods to mitigate harmful interference. Our Office of Engineering and Technology has been evaluating a variety of issues, such as indoor and outdoor use cases and a variety of power levels, to discern whether and to what extent unlicensed operations can exist alongside incumbent uses. I can assure you that the Commission's ultimate decision will be grounded in sound engineering analysis. And I remain optimistic that we will be able to develop a set of technical rules that will both safeguard incumbent users and allow for unlicensed operations throughout the band.

The Commission has also been following the well-established interagency process for receiving the views of other federal agencies with equities in this proceeding. That process to date has included routine discussions and meetings with NTIA on behalf of other federal agencies and consultation with the Department of Energy and the Federal Energy Regulatory Commission. FCC personnel are regularly in contact with their counterparts at FERC on this and other issues of concern to both agencies.

Question 4: Low Power TV Stations

Low Power TV (LPTV) stations provide locally-oriented service to small and rural communities. LPTV programming can be tailored to viewers in a more localized manner and is less expensive and more flexible than a traditional TV station. This carriage is optional for satellite carriers, even though many customers in rural areas – like those in my home state – rely on satellite service when cable does not or cannot reach their home. WVUX, a local LPTV carrier in my home county, has had difficulty getting carried by DirecTV or DISH. They have sought relief from the FCC by petitioning for a Declaratory Ruling that satellite carriers observe the must carry rules for qualified low-power stations. Can I work with your office to receive an answer from FCC for WVUX?

- Do you foresee benefits to rural areas in requiring satellite carriers to carry the signals of local LPTV stations or local public broadcasting?
- What would be the challenges in doing so?
- Can you make this change on your own or do you need Congressional clarification in order to do so?

RESPONSE: The Media Bureau issued a Memorandum Opinion and Order on October 24, 2019 that denied the petition for declaratory ruling and demand for carriage of WVUX. In its decision, the Bureau indicated that, as an LPTV station, WVUX does not have mandatory carriage rights on satellite systems pursuant to section 338 of the Communications Act even if the station may be qualified to be carried by cable systems under a different provision of the Act. WVUX filed an Application for Review of the Bureau's decision on November 22, 2019

and that AFR is currently pending. I hope that the Bureau can provide its recommendations for the full Commission's consideration in the near term. As you know, I have long been a supporter of local broadcast stations and the service that they provide to their communities—whether the stations are full power or LPTV stations. However, Congress has been explicit in its intent when it comes to mandatory carriage issues and the Commission must faithfully apply the statutory provisions as written. Of course, Congress is always free to modify the Communications Act to provide LPTV stations with additional carriage rights if it chooses to do so.

Committee on Appropriations
Subcommittee on Financial Services and General Government

Hearing on Oversight of the Federal Communications Commission Spectrum Auctions Program, Part 2

November 21, 2019

Subcommittee Questions for the Record

Senator Joe Manchin III

Question 1: C-BAND Auction. I understand that the FCC has announced that they intend to move forward with a public auction of C-Band Spectrum that would free up this spectrum for the deployment of 5G. I know there are a lot of national security and economic reasons for the push to 5G, but here in West Virginia, we're lucky to even get 1G which is unacceptable. I've heard from several emergency service coordinators who tell me landlines in my state are unreliable for those who need to call for help during an emergency but unfortunately that is the only option they have. Having better quality cell phone coverage could mean the difference between life and death for us in West Virginia.

- Have you considered setting aside a portion of the funds from this auction for building out fiber to rural areas that will likely never see 5G deployed in their area?
- Have you considered providing compensation to the rural ground operators that receive these satellite signals? This could be used to expand C-Band or for a variety of upgrades to ensure they expand their reach to their rural customers.

RESPONSE: I agree that it is essential for us to close the digital divide, including in rural areas. However, under the Miscellaneous Receipts Act, the Commission does not have the authority to direct proceeds from the C-band auction to support rural broadband deployment. This is a longstanding issue and not specific to the C-band. And that's why, as a Commissioner back in 2016, I proposed that Congress adopt a "rural dividend" so that 10% of auction proceeds would go toward rural broadband deployment. I stand ready to work with you and your colleagues to get such a proposal adopted.

As for rural ground operators, the Report and Order we adopted in February ensures that all incumbent earth stations will be fully compensated for any costs they incur in the transition.

Question 2: Broadcast Issues in West Virginia. Last year, the FCC granted a request by two West Virginia counties and three stations in my state to modify their satellite markets so that West Virginia viewers could get local news, sports, and other programming. They had previously only received Pennsylvania stations from the Pittsburgh designated market area (DMA). However, these issues still persist in wireline connections. West Virginia University, our state's land grant university, is still located in the Pittsburgh DMA. The Eastern Panhandle of my state faces similar issues. Rural TV providers such as Hardy Telecommunications in Hardy County, W.Va., are forced to pay for and carry broadcast channels in their DMA (Washington, D.C.) and must get permission to carry any corresponding broadcast channel outside of their DMA, even if that outside channel is more relevant to West Virginia consumers. For example, a Clarksburg, W.Va., station offering West Virginia-related news provides much

more relevant and important content to rural West Virginia residents than a D.C. station that offers none.

- Given today's technology and availability of programming, are you considering an update to the DMA-restrictive system to allow a free market approach for TV service providers, especially those in rural areas where most consumers can no longer receive major broadcast channels off the air?
- What methods do you have in place to ensure that broadcast stations are negotiating "in good faith" with TV service providers?
- Have you considered reforms to allow TV service providers and subsequently their consumers more choice in choosing a la carte programming and not allowing broadcast channels to force "sidecar" channels on providers with additional fees and carriage requirements?

RESPONSE: I have been a long supporter of over-the-air broadcast TV stations and the service that they provide to consumers. And I understand the frustrations that some consumers face when they cannot access the broadcast TV stations they desire through their multichannel video programming distributor (MVPD). However, Congress has specifically determined through the Communications Act which TV stations are considered "local" to a particular area and thus required to be carried by either a cable system or satellite provider.

Specifically, Section 614(h)(1)(A) says that a local television station is one that is assigned to the same television market as the cable system. In implementing this requirement, the FCC defined a station's "television market" as the station's designated market area (DMA) as assigned by Nielsen Media Research. For satellite providers, Congress was even more explicit by specifically defining in statute that the local stations are determined by Nielsen's DMA map. *See* 47 U.S.C. § 338(k)(4) (defining "Local Market" as the same as the meaning provided in 17 U.S.C. §122(j)). Section 122(j) defines "Local Market" as the designated market area as determined by Nielsen Media Research. *See* 17 U.S.C. §122(j)(2)(A) and (C). Congress did allow for some flexibility by providing the Commission with the authority to modify markets to add or delete communities in a commercial television station's local market if a petitioner can show it meets specific statutory factors. However, the Commission does not have the authority to modify markets on its own accord. I would encourage your local stations or smaller MVPDs to look into whether the market modification process could be an option to pursue.

The Commission has in place specific good faith negotiation rules that govern retransmission consent negotiations between broadcast stations and MVPDs. *See* 47 C.F.R. § 76.65. The rules outline nine specific actions that would be considered a *per se* violation of the good faith negotiation requirement, along with a totality of the circumstances test that also can be applied. The Commission relies on a party to file a complaint with the Commission alleging a violation of the rules, and generally is not involved in the private negotiations between the parties absent a complaint. Neither the Communications Act, nor the Commission's rules, prohibit a station from negotiating for carriage of other programming when it is in retransmission consent negotiations for the carriage of its primary signal. In addition, Commission rules do not prohibit an MVPD from providing its programming on an a la carte basis if it chooses to do so.

Federal Communications Commission
Office of Legislative Affairs
Washington, D.C.20554

Office of the Director

January 28, 2020

The Honorable Frank Pallone
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Pallone:

Enclosed please find Chairman Pai's responses to the Questions for the Record from the December 5, 2019, hearing on Accountability and Oversight of the Federal Communications Commission.

Please let me know if can be of any further assistance.

Sincerely,

Paul A. Jackson
Director

Enclosure

cc:

The Honorable Greg Walden
Ranking Member
Committee on Energy and Commerce

The Honorable Mike Doyle
Chairman
Subcommittee on Communications and Technology
Committee on Energy and Commerce

The Honorable Robert E. Latta
Ranking Member
Subcommittee on Communications and Technology
Committee on Energy and Commerce

Questions for the Record

Subcommittee on Communications and Technology

Hearing on

"Accountability and Oversight of the Federal Communications Commission"

December 5, 2019

The Honorable Ajit Pai, Chairman, Federal Communications Commission

The Honorable Anna G. Eshoo (D-CA)

1. I'm pleased the Lifeline National Verifier now has automated connections with Centers for Medicare and Medicaid Services databases to verify Lifeline eligibility and that the FCC is working to establish a similar connection with the Department of Veterans Affairs for its Veterans and Survivors Pension Benefits program.

   Is the FCC working with the Department of Agriculture to establish automated connections for the Supplemental Nutrition Assistance Program (SNAP), given the significant overlap between recipients of SNAP and Lifeline?

   RESPONSE: USAC has conferred with the Department of Agriculture, as well as other federal and state agencies and Tribal governments, on expanding the National Verifier to include available data sources for all qualifying eligibility programs. Currently, there is no nationwide database of SNAP recipients maintained at USDA or any other federal agency. Rather, that data is maintained at the state level. As a result, the National Verifier has built automated connections with 15 state systems with SNAP data, and USAC is working with additional states and territories to build new automated connections in 2020. The FCC and USAC remain willing to work with any state, territory, or district that is interested in establishing an automated eligibility verification connection with the National Verifier.

2. One goal of the National Verifier was to reduce waste, fraud, and abuse. Has the FCC tested the accuracy of the results of National Lifeline Accountability Database (NLAD) and National Verifier that ETCs receive? Are you aware of concerns that ETCs are receiving false information about Lifeline eligibility from NLAD or the National Verifier?

   RESPONSE: The Commission is not aware of concerns that ETCs are receiving false information about Lifeline eligibility from the NLAD or the National Verifier. USAC safeguards the accuracy of Lifeline eligibility results through comprehensive data integrity measures. These include prioritization of automated connections to federal and state data sources to minimize manual document review; adherence to a rigorous data matching process in establishing such connections; a dispute resolution process for consumers whose eligibility cannot be verified through underlying source data; and centralized review of eligibility documentation by USAC and its vendor using uniform eligibility criteria and consistent quality control standards. USAC also regularly conducts sampling and audits of its systems and processes to ensure compliance with FCC rules.

3. The decision to increase minimum service standards was proposed in conjunction with a port freeze. Coupling these items was essential for increasing service, while also reducing waste, fraud, and abuse. Why is the FCC moving forward with just increasing minimum service standards which has caused carriers to cease providing Lifeline services?

   RESPONSE: On November 15, 2019, the Commission granted a partial waiver of the next update to the Lifeline minimum service standards for mobile broadband usage. Based on an industry proposal, the Commission increased the standard for mobile broadband usage from 2 GB to 3 GB on December 1, instead of the previously scheduled increase (set by the Commission in 2016) to 8.75 GB. In doing so, the Commission affirmed the need for better broadband for Lifeline's low-income consumers while at the same time rejecting a much higher increase in the minimum data allowance that could have had a detrimental impact on the program and caused undue disruption to Lifeline subscribers. We are also unaware of any carrier that has ceased providing Lifeline services as a result of this modest increase in service standards.

4. The FCC found that "the large increase in the minimum standard for mobile broadband usage could unduly disrupt service to existing Lifeline subscribers." Would the FCC suspend the implementation of next year's minimum service standard if a similarly large increase is anticipated again?

   RESPONSE: The Commission's *2016 Lifeline Order* set forth a formula to calculate the updated minimum service standard for mobile broadband usage based on certain data regarding consumer broadband usage and directed the FCC's Wireline Competition Bureau to announce the results of that formula by July 31st each year. Because we do not yet know what the results of that calculation will be for December 2020, the Commission is not yet in a position to determine whether it would serve the public interest to waive the next minimum service standard update.

5. Is the FCC considering opening a new proceeding to revisit the appropriate formula for calculating minimum service standards for Lifeline mobile broadband service?

   RESPONSE: In the *2017 Lifeline Order and NPRM*, the Commission sought comment on, among other issues, the Lifeline Program's minimum service standards and asked if it should "revise the formulas used to determine the minimum service standards or adjust the mechanisms by which the minimum service standards are updated." The Commission received multiple comments on this issue, and it remains under consideration.

6. You've raised network security issues as a major concern of yours. Beyond supply chain issues, which the FCC and our Subcommittee have worked on, what other recommendations can you make relative to securing our nation's wireless networks—for example, addressing SIM swaps, carriers' usage of dated encryption and authentication algorithms, and the threats of cell simulators or IMSI catchers?

RESPONSE: In today's increasingly connected world, safeguarding the security and integrity of America's communications infrastructure has never been more important. The Commission has taken several targeted steps within our statutory authority to protect the nation's communications networks from potential security threats. For example, the Commission recently adopted improvements to its submarine cable outage reporting requirements to focus reporting on significant disruptions including events with national security implications.

I have discussed my support for 5G security issues to be addressed early in the process. *See, e.g.*, Remarks of Chairman Ajit Pai at the Prague 5G Security Conference 2 (May 2, 2019), https://docs.fcc.gov/public/attachments/DOC-357288A1.pdf (last visited Nov. 29, 2019). Making the right choices before deployment is much easier than trying to correct mistakes once network construction and operation is well underway. 5G security decisions must be made with the long-term in mind and in coordination with our international partners (where possible). Last May, more than 140 representatives from 32 countries came together to develop the Prague Proposals, a consensus approach for protecting next-generation networks. As acknowledged in the Proposals, there are no universal solutions to security. Rather, "[t]he decision on the most optimal path forward when setting the proper measures to increase security should reflect unique social and legal frameworks, economy, privacy, technological self-sufficiency and other relevant factors important for each nation." *See* https://www.vlada.cz/en/media-centrum/aktualne/prague-5g-security-conference-announced-series-ofrecommendations-the-prague-proposals-173422/

Use of more advanced wireless protocols will also help to improve mobile security. According to publicly available information, AT&T has already discontinued its 2G network and Verizon Wireless and T-Mobile are expected to shut-down their 2G networks soon. Specifically, AT&T discontinued service on its 2G wireless network in January 2017. *See* https://about.att.com/innovationblog/2g_sunset. Consistent with its public statements, in its recently filed FCC Form 477 data, AT&T no longer reports having 2G service. Verizon Wireless stated that it planned to shut down its 2G CDMA network by the end of 2019. *See Applications of T-Mobile US, Inc., and Sprint Corp. for Consent to Transfer Control of Licenses and Authorizations, et al.*, Memorandum Opinion and Order, declaratory Ruling, and Order of Proposed Modification, WT Docket No. 18-197, FCC 19-103 at para. 335, n.1177 (2019) (Sprint/T-Mobile Order). T-Mobile has stated that it will support 2G until December 2020 (*See* https://www.geotab.com/blog/2g-network-shutdown/), and Sprint has indicated that the termination of its CDMA network is not expected to commence prior to January 2021. Sprint/T-Mobile Order at para. 298. We are also aware, however, that certain much smaller carriers, typically in rural areas, have not announced their plans to switch-off their 2G networks, despite incentives they might have to use the most efficient technology/network. This could not only expose their users to vulnerabilities but also could

create problems if a subscriber who roamed into a 2G-only area had 2G roaming disabled on his or her device—particularly in emergency call situations.

While the Commission has not taken a formal stance on the use of encryption, the issue has been addressed in the context of advisory committees. For example, the Commission uses the Communications Security, Reliability, and Interoperability Council (CSRIC), a Federal Advisory Committee, to promote the security, reliability, and resiliency of the Nation's communications systems. In 2009, FCC tasked the CSRIC to recommend best practices that encourage communications service providers to secure their networks. In 2011, CSRIC recommended that the Commission encourage communications service providers to incorporate standards-based encryption services on their networks. CSRIC recommended that communications service providers "incorporate cellular voice encryption services and ensure that such encryption services are enabled for end users" and "encourage the use of IPsec VPN, wireless TLS, or other end-to-end encryption services over the cellular/wireless network." While the Commission does not track service provider implementation of CSRIC best practices, they were developed and recommended by practitioners, which increases the likelihood that they will be implemented by communications providers. The Commission makes CSRIC best practices available to the public through a Commission-hosted database, which is available at https://opendata.fcc.gov/Public-Safety/CSRIC-Best-Practices/qb45-rw2t/data.

The FCC also re-chartered CSRIC through 2021. With regard to wireless communications, the re-chartered council is considering standard operating procedures for the security of 5G and 911 networks, and the security of the Session Initial Protocol used to initiate, maintain and terminate voice, video and messaging applications. The schedule for the delivery of final recommendations from CSRIC is available on the Commission's website at https://www.fcc.gov/files/csric7wgdescriptionsdocx.

Regarding SIM swaps, the FCC has a consumer guide on cellphone fraud that provides useful information on how consumers can protect themselves, available at https://www.fcc.gov/consumers/guides/cell-phone-fraud. I also have asked the Consumer and Governmental Affairs Bureau to review whether there are other steps consumers can take to protect themselves and what consumer education efforts may be beneficial.

Regarding IMSI catchers, the Commission takes the threat of rogue cell sites seriously. We work with our interagency partners to address the issue, using the tools (particularly related to equipment authorization and enforcement of Commission rules) provided by our existing authorities. The Commission places conditions on IMSI catcher equipment certifications: first, that marketing and sale of these devices shall be limited to federal, state, and local public safety law enforcement officials only; and second, that state and local law enforcement agencies must coordinate in advance with the FBI regarding the acquisition and use of the equipment.

7. Some are proposing allocating spectrum in the 6 GHz band for licensed use, by relocating incumbents to the 7 GHz band, though that band is currently occupied by government entities, including the Department of Defense. How long has the FCC been working with the federal government on allocation of 7 GHz?

RESPONSE: The Commission is not working with federal entities, including the Department of Defense, regarding the relocation of 6 GHz incumbents to the 7 GHz band. Any potential relocation of 6 GHz band incumbents to the 7 GHz band would require either sharing between the incumbent Federal users and relocated 6 GHz users, or relocation of the incumbent Federal users to other spectrum.

8. As you have recognized, the need for unlicensed spectrum is as high as ever, and it's growing. Some have raised concerns about harmful interference to microwave services if unlicensed devices would be allowed to operate in the 6 GHz band. Do you have the data necessary to create rules for these two services to coexist?

   RESPONSE: I have consistently stated that the Commission is committed to protecting incumbent systems in the 6 GHz band from harmful interference. The Commission provides for a robust and transparent rulemaking process to encourage all stakeholders and interested parties to file comments with supporting data and engineering studies and analyses. The record reflects several detailed technical studies and analyses relating to the potential impact of unlicensed use on incumbent use of the 6 GHz band and technical and operational methods to mitigate harmful interference. Our Office of Engineering and Technology has been evaluating a variety of issues, such as indoor and outdoor use cases and a variety of power levels, to discern whether and to what extent unlicensed operations can exist alongside incumbent uses. The Commission will ultimately be driven by the facts in the record, including the technical analysis that OET compiles.

9. One promising innovation in wildfire mitigation is the Falling Line Conductor that uses low-latency, private LTE networks to depower a broken line before it hits the ground and becomes a fire hazard. Do you have a view on how such technologies can help mitigate wildfire threats and the need for preemptive electrical shutoffs? When will the FCC complete its 900 MHz proceeding that impacts the ability of utilities to use such technologies?

   RESPONSE: I agree that new technologies can help mitigate public safety emergencies, such as wildfires. Robust, next-generation broadband networks can encourage the development of such technologies. That is why the FCC is pursuing a comprehensive strategy to Facilitate America's Superiority in 5G Technology (the 5G FAST Plan). The plan includes three key components: (1) pushing more spectrum into the marketplace; (2) updating infrastructure policy; and (3) modernizing outdated regulations. Under my leadership, the FCC has proposed to make a segment of the 900 MHz band available for mobile broadband. I am confident we will be able to move forward in that proceeding in the near future.

10. YouMail reports that Americans received a record-breaking 5.7 billion robocalls in October, an increase of 25% from September. While I'm supportive of S. 151, the *Pallone-Thune TRACED Act*, I'd like to understand the FCC's enforcement efforts under its current statutory authorities.

    a. How many employees are dedicated to investigating or enforcing violations of the TCPA? If you'd prefer to provide full-time equivalents, please also provide the number

of employees whose primary responsibility is investigation or enforcement of TCPA violations.

b. How many investigations has the FCC opened in the last 12 months that involve potential violations of TCPA?

c. How many enforcement actions has the FCC taken in the last 12 months for violations of TCPA?

d. What is the average length of time between opening an investigation and taking an enforcement action for enforcement actions taken in the last 12 months?

RESPONSE: The Enforcement Bureau has 12 full-time employees primarily dedicated to the investigation and enforcement of section 227, which includes both the TCPA and the Truth in Caller ID Act. In addition, other Commission personnel spend significant time on the investigation and enforcement of TCPA and Truth in Caller ID Act violations, including senior managers, analysts, and others who split their time among different enforcement priorities. We estimate that these additional personnel amount to the equivalent of four or five full-time employees. Many other people at the Commission work to combat TCPA and Truth in Caller ID Act abuses outside of the enforcement context.

From December 1, 2018, to present, the FCC has opened 38 investigations that involve potential violations of the TCPA. Of the numerous investigations opened from December 1, 2018 to present, we have taken four formal FCC actions against TCPA violators. Specifically, the FCC has issued three warning citations, which until recently (due to passage of the TRACED Act) were required by the Communications Act before the Commission could assess a monetary penalty against a non-licensee for TCPA violations. The Commission has also issued one Notice of Apparent Liability for Forfeiture proposing monetary penalties for spoofed robocalls that violate the Truth in Caller ID Act. Other TCPA and Truth in Caller ID Act investigations remain in the active investigation phase, during which Commission staff work to determine whether violations have occurred, to identify and locate violators, and to build an evidentiary record to support prosecution. Toward this end, Commission staff have issued hundreds of investigatory subpoenas over the past year to advance these investigations, which may culminate in enforcement actions depending on the facts adduced.

For the four enforcement actions issued from December 1, 2018 to present, the average length of time between opening an investigation and issuing a citation under the TCPA or an NAL under the Truth in Caller ID Act was 649 days. The Truth in Caller ID Act NAL was issued 548 days from the start of the investigation, and the three TCPA citations were issued an average of 680 days after an investigation began.

11. At a May 7th hearing of the Senate Subcommittee on Financial Services and General Government Appropriations titled "Review of the FY2020 Budget Request for the FCC & FTC," FTC Chairman Joseph Simons said that there are certain U.S. carriers that cater to allowing foreign companies to robocall Americans. He stated that the FTC is aware of which carriers are causing the greatest problems but cannot do anything because the FTC lacks

jurisdiction over such carriers. Senator John Kennedy asked you to look into the matter given the FCC's jurisdiction over these companies.

a. Is the FCC aware of the identities of the carriers Chairman Simons is referring to?

b. How many carriers are on this list?

c. To the FCC's best estimation, what percentage of the robocalls in the U.S. travel through these carriers?

d. What are the names of the companies on this list?

e. How many of these carriers has the FCC opened investigations into?

f. How many of these carriers has the FCC taken enforcement actions against?

RESPONSE: Although the Commission's Enforcement Bureau staff routinely works with the Federal Trade Commission (FTC) staff, the FTC did not disclose the names of the service providers referenced at the hearing until after the hearing. Since that time, the Enforcement Bureau has confirmed that almost every service provider cited is *not* a common carrier and thus is subject to FTC enforcement. The Enforcement Bureau did investigate the two service providers that appeared to be common carriers, but its investigation did not show a connection between these two carriers and any illegal robocalling campaigns.

Consistent with long-standing Commission policy to protect the confidentiality of our investigations, as well as those of our sister agency, I cannot identify the service providers at this point nor disclose additional information about them.

12. On June 11, 2019 at a USTelecom Forum on robocalls, you said "Now that the FCC has given you the legal clarity to block unwanted robocalls more aggressively, it's time for voice service providers to implement call blocking by default as soon as possible." I couldn't agree more. Have carriers responded to this call to action? Have companies raised legal, technical or other objections with these actions requested?

RESPONSE: While I understand that some carriers are implementing or planning to implement call blocking services by default, the Consumer and Governmental Affairs Bureau recently released a Public Notice seeking comment on the implementation and effectiveness of blocking measures. The data collected from this notice will inform a staff report that will be released in June 2020. I expect this first report will outline the availability of call blocking for consumers and the effectiveness of these tools. The notice also sought comment on any other relevant information related to the deployment of blocking services.

13. At the same USTelecom event in June, you said that "USTelecom has been particularly helpful in making sure that we can quickly trace scam robocalls to their originating source."

a. How successful has USTelecom's Industry Traceback Group (ITG) been in combatting robocalls?

b. How many referrals has the ITG made to the FCC for enforcement actions?

c. How many of these have led to investigations?

d. Of those investigations, how many have led to enforcement actions?

RESPONSE: The ITG's work has been and continues to be instrumental in assisting the Commission in its battle against illegal robocalls. The ITG's traceback process has streamlined and drastically shortened the amount of time needed to identify involved parties. Specifically, where it could have taken months to find the originator of a robocall campaign, it now typically only takes weeks or, in some instances, just a few days to gather such information.

The ITG's traceback process continues to evolve and goes beyond merely identifying the robocalls' origin. The process now provides the FCC more detailed information about the robocall campaigns, such as the subject matter of a robocall campaign and even transcripts or recordings of the calls. The creation of the ITG and its continued operation has led to greater awareness of the scope of the illegal robocalling problem and increased cooperation from service providers to work to end the abuse of illegal robocalls.

The information provided by the ITG to the Commission has led to or assisted in more than two dozen EB investigations over the past three years. Even referrals from the ITG or its member organizations that have not yet led to formal enforcement action have helped EB staff identify patterns in and common sources of robocall traffic.

The ITG also works with state attorneys general and other federal law enforcement that have jurisdiction over illegal robocalls. The ITG traceback process gives service providers valuable information about their customers—information that can prompt providers to more closely scrutinize their customers' compliance with contractual TCPA obligations. The result is that repeat robocalling offenders are more readily identified and service providers can put a stop to bad robocalling traffic sooner, thereby protecting their own networks and their customers, which serves as another deterrent to illegal robocalling.

During the last three years, the ITG has made 34 referrals to the Commission. All ITG referrals have led to new, or have assisted in existing, Commission investigations. To date, we have issued one citation as a result of an ITG referral, and 27 referrals are part of active investigations.

14. A *Wall Street Journal* article titled "Small Companies Play Big Role in Robocall Scourge, but Remedies Are Elusive" states that "The FCC has asserted limited jurisdiction over VoIP providers, an agency spokesman said." What prevents or limits the FCC from using existing statutory authority to take enforcement actions against VoIP providers?

RESPONSE: The Commission has jurisdiction to take enforcement action against any entity—VoIP provider, common carrier, or marketing company—that violates the TCPA. However, as the *Wall Street Journal* article highlights, the myriad, and typically small, VoIP providers have an outsized role in carrying illegal robocall traffic. Moreover, VoIP

providers typically do not have a certification or other authorization from the FCC. Therefore, it is more difficult to monitor and regulate their behavior.

However, Congress recently passed the TRACED Act, which will remove one significant impediment to enforcing section 227 against VoIP providers. Until recently, the Commission had to issue a warning or "citation" to entities that do not hold a Commission authorization. As a result of the TRACED Act, we may now proceed directly to a Notice of Apparent Liability and propose a monetary forfeiture. In addition, the Commission has taken steps to reduce the number of unwanted robocalls that reach consumers. For example, service providers may block robocalls to their customers under certain conditions.

15. The FCC's "Report on Robocalls" (CG Docket No. 17-59; February 2019) states that "Five providers that had been identified as uncooperative in traceback have taken steps to participate going forward." Have these five providers continued cooperating with traceback efforts? Do *any* providers remain that are not being cooperative?

RESPONSE: The information in the FCC's February report concerning non-cooperative providers was based on information we obtained from USTelecom. Specifically, FCC Enforcement Bureau staff coordinated with the ITG about its experiences requesting the cooperation of providers in traceback investigations. These discussions identified five specific providers that had a track record of ignoring, denying, or failing to assist with ITG's requests for traceback data.

The FCC sent a series of letters in the fall of 2018 to those providers (and others) requesting information and expressing our desire for greater cooperation with ITG. Afterward, those five providers took steps to cooperate better with ITG. We have not identified any additional specific providers that are refusing or failing to cooperate with ITG at present.

We anticipate that EB and ITG will continue to work together to identify potentially non-cooperative providers and to identify and solve other problems as they develop. In addition, pursuant to the TRACED Act, the Commission will establish rules to develop a process that will evaluate and report on private efforts to trace back the origin of suspected unlawful calls and identify providers that declined to participate in such private trace back efforts, including the reason, if any, for such non-participation.

The Honorable Doris Matsui (D-CA)

1. The Federal Communications Commission (FCC) is currently evaluating a license modification proposal for commercial wireless services in the L-Band. The FCC has taken more than four years to evaluate this proposal and it has created unsustainable uncertainty for both federal and private stakeholders in this process. This proposal has significant implications for the communications marketplace and requires a prompt resolution.

   Chairman Pai, do you believe you have sufficient information in the record to resolve this matter and when do you expect the FCC to act?

   RESPONSE: The FCC is committed to resolving harmful interference concerns prior to allowing commercial terrestrial operations in the L-Band. While Ligado filed its original license modification plan in 2015, it filed an amendment to its applications on May 31, 2018, in an attempt to further address interference concerns raised by federal agencies. Commission staff sought and received comment on Ligado's updated proposal, and federal agency testing has concluded.

   Late last year, I submitted to the Interdepartment Radio Advisory Committee (IRAC), headed by the Department of Commerce's National Telecommunications and Information Administration (NTIA), a draft FCC decision resolving Ligado's request. On December 6, 2019, NTIA filed a letter with the FCC in which it noted that "federal agencies have significant concerns regarding the impact [of Ligado's license modification proposal] to their missions, national security, and the U.S. economy" and, therefore, "NTIA, on behalf of the executive branch, is unable to recommend the Commission's approval of the Ligado applications." *See* Letter from Douglas W. Kinkoph, Deputy Assistant Secretary for Communications and Information (Acting), NTIA, to The Hon. Ajit Pai, Chairman, FCC, IB Docket Nos. 11-109 and 12-340 at 2 (filed Dec. 6, 2019). The Commission, through its engineers and technologists, are working diligently so that the Commission can make the appropriate decision in this proceeding. The Commission will move forward with a final decision informed by the full record and submissions from all stakeholders, after career staff have completed their technical analysis of the information provided by NTIA.

The Honorable Peter Welch (D-VT)

1. A lack of broadband connectivity can impact all aspects of our lives: keeping children on the wrong side of the homework gap from realizing their full potential, posing barriers to telehealth solutions that can improve care, keeping farmers from capitalizing on advancements in precision agriculture, and limiting economic opportunities for workers and small businesses. However, I have been encouraged by the Commission's support of innovative solutions, specifically TV white space, that can enhance the pace, reach and cost-effectiveness of broadband deployment in rural communities. The adoption of a final order in the TV white space (TVWS) reconsideration proceeding earlier this year marked an important first step, and I encourage the Commission to build on this step by issuing a Further Notice of Proposed Rulemaking (FNPRM) to address remaining regulatory hurdles to greater TVWS deployment as soon as possible. By taking this step, the Commission can update its rules surrounding TVWS, which will increase the potential for rural broadband deployment and, subsequently, the availability and adoption of Internet of Things (IoT) applications throughout rural areas.

   Will the Commission make the adoption of a TV White Space Further Notice of Proposed Rulemaking a priority to complete as soon as possible and no later than the first quarter in 2020?

   RESPONSE: The Commission continues to work toward ensuring that White Space devices are positioned to offer providers flexibility in designing networks to reach end users, especially in rural and underserved areas. In our continuing efforts along these lines, we are evaluating a petition that seeks several rule changes to facilitate broader deployment of white space devices in rural areas and for Internet of Things applications. The Commission's staff has reviewed the comments and reply comments on the petition and are working on a Further Notice of Proposed Rulemaking that would explore the requested changes. I am aiming to circulate an item in the near future.

The Honorable Yvette Clarke (D-NY)

1. Mr. Chairman, I'd like to raise the issue of diversity in media, specifically the lack of diversity. I believe American media needs to reflect America, but today, despite the explosion of options now available to consumers, it still does not.

   According to UCLA's College of Social Studies 2019 Hollywood Diversity Report that looks at diversity in the media industry, people of color accounted for only 19.8 percent of film leads, 12.6 percent of film directors, and 7.8 percent of film writers. On TV and digital, only a little over 20 percent of the lead actors are people of color and for script creators that number drops to around 10 percent.

   There are some exceptions in the industry, Starz for example has done a very good job creating shows by and for traditionally underserved minority audiences, such as the top-rated "Power".

   Others, like Comcast, have not. Just look at what happened to Gabrielle Union this week or what it is doing in the courts right now challenging a more than 150-year-old statute that prohibits racial discrimination in contracts.

   As the Commission considers future media mergers, I urge it to examine very closely the impact that more consolidation would have on media diversity. I believe as these media companies grow larger and larger, it will not only reduce competition and localism, but it will harm diversity and the diverse voices that deserve and need to be heard.

   What role does the Commission play in promoting and expanding diversity in media? What actions do you plan to take as Chairman to ensure the Commission leads efforts to remedy lack of diversity on our airwaves?

   RESPONSE: I believe that the Commission has an important role to play in promoting diversity. That's why I quickly moved to re-charter the agency's Advisory Committee on Diversity and Digital Empowerment in 2017, a Committee that had gone dormant under my predecessor. I tasked the Committee's leaders with developing real-world solutions to spur diversity and digital empowerment in under-served communities. The first iteration of the Committee quickly went to work and held a Supplier Diversity Conference and Workshop in June 2018, followed up by a March 2019 Symposium on Media Diversity. In addition, the Committee's Broadcast Diversity and Development Working Group coordinated very comprehensive comments in our broadcast incubator rulemaking proceeding in 2018, and the Committee's Diversity in Tech Working Group produced a diversity best practices report in 2019, capturing information it gleaned from industry. I was happy to re-charter this Committee last year for an additional two-year period, and I look forward to the recommendations that come from the group.

   As mentioned above, with the help from the Diversity Committee, we took steps to create a broadcast incubator program to help new entrants—including women and minorities—find established broadcasters who will support them as they start out in the industry. This was an idea that had been discussed for decades, but the Commission had never taken any action. I was proud to bring this idea to fruition with the promise that it could help promote diversity

of ownership in the broadcasting industry. But unfortunately, this program became a victim of the Third Circuit's misguided decision to vacate and remand our 2017 Reconsideration Order on the Media Ownership Quadrennial Review. Without explanation, the court also vacated and remanded the separate order that established the incubator program.

Finally, we have sought comment on a variety of diversity proposals as part of the 2018 Media Ownership Quadrennial Review. This action comes on the heels of the implementation of another diversity proposal: the relocation of the Commission's EEO functions from the Media Bureau to the Enforcement Bureau, a step supported by civil rights advocates.

2. Chairman Pai, I am concerned that the FCC under your leadership is not complying with the decisions of our federal courts.

   a. How is the FCC planning to implement the Third Circuit Court of Appeals decision in the most-recent *Prometheus v. FCC* case? Specifically, how are you planning to ensure that the data about media ownership diversity is accurate and is used to evaluate how proposed media ownership rule changes will impact media ownership by women and people of color?

   b. Why didn't you ensure the FCC was in compliance with the previous Court of Appeals decisions which directed the FCC to analyze the impact of its rule changes on media ownership by women and people of color?

RESPONSE: The Commission is currently evaluating its options with regard to seeking additional court review of the Third Circuit's decision last year. As noted at the time of the decision, I respectfully disagree with the majority's opinion in the case. I believe that the Commission adequately addressed the impact of modifying the media ownership rules on minority and female ownership. The Commission properly considered that impact based on the record developed and balanced that consideration against its statutory obligation to review the media ownership rules under section 202(h).

In the meantime, now that the mandate has issued, the Media Bureau recently took three actions: (1) release of an Order reinstating the 2016 Quadrennial Review Media Ownership Rules; (2) release of a Public Notice outlining steps that applicants must take to ensure pending and future license transfer applications comply with the reinstated rules; and (3) release of a Public Notice outlining the steps that licensees with pending license renewal application must take to amend their application to demonstrate compliance with the reinstated rules.

The Honorable Tom O'Halleran (D-AZ)

1. Chairman Pai, the Intergovernmental Advisory Committee recently made recommendations to the FCC to address regulatory barriers to telemedicine. One of these recommendations was to expand types of eligible equipment that may be considered a reimbursable cost under the Rural Health Care Program.

    a. Has the Commission given this recommendation, and others, further consideration for future rulemakings?

    RESPONSE: Broadband plays a critical role in providing patients in rural areas with high-quality healthcare services, and the Commission has taken numerous steps to best ensure that the Rural Health Care Program enables health care providers can afford the connectivity they need to treat their patients. In 2018, for the first time in the Rural Health Care Program's two-decade history, the Commission increased its funding cap to ensure that the program could meet the demands of modern telemedicine. And in 2019, the Commission adopted significant reforms to the program that will ensure transparency and efficiency so that funding can go as far as possible. The Commission sought comment on a $100 million Connected Care Pilot Program that would explore ways to use universal service funding to support technologies that directly connect doctors with their patients, including whether that equipment is eligible for support. The Commission received comments from a number of stakeholders discussing which services, technologies, and equipment the proposed pilot should support. Commission staff are currently reviewing the record in that proceeding.

2. Chairman Pai, beyond the Tribal Priority Window within the upcoming 2.5 GHz spectrum auction, it is clear that more needs to be done to prioritize broadband buildout to Indian Country. I also understand the Office of Native American Policy and Native American Communications Task Force work closely on providing recommendations to the Commission to increase tribal broadband deployment. Tribal consultation and engagement are critical to the success of internet connectivity increasing across Indian Country.

    a. As the Office of Native American Policy consists of only two staff members and housed within the Consumer & Governmental Affairs Bureau, has the Commission considered or given feedback on how the Office of Native American Policy could be expanded or elevated to better perform its duties?

    RESPONSE: Closing the digital divide for all Americans is my number one priority. I agree with you that Tribal consultation and engagement is critical in the Commission's goal to increase telecommunications services to Tribal lands. I recognize that there are particular challenges in providing communications services on Tribal lands, but I believe that the Commission's Office of Native Affairs and Policy (ONAP) has the resources it needs to be successful in its mission as the Commission's primary point of contact on Native issues, including Tribal consultation and outreach.

    ONAP has five full-time staff working on Tribal consultations and related issues. In addition, ONAP receives substantial daily support from an experienced Deputy Bureau Chief charged with primary responsibility for overseeing the office, as well as additional support

from other Bureau-level legal advisors. Within the Bureau, ONAP greatly benefits from the synergies with other CGB offices, including routine coordination with staff in the Office of Intergovernmental Affairs and other Bureau-level specialists. In addition, like other offices in a small agency of under 1,500 FTEs, ONAP does not work in isolation, but rather coordinates on a regular basis with subject-matter experts in the Wireless Telecommunications Bureau, the Wireline Competition Bureau, and the Media Bureau, as well as the Office of Engineering and Technology, the Office of Economics and Analytics and the Office of Managing Director on items of significant Tribal interest. These experts not only advise ONAP on an ongoing basis, they also partner with ONAP to address and conduct Tribal consultations and related outreach. As currently structured, the Office has the ability to be flexible in its approach and work across the agency to obtain the best results for Tribes. For example, ONAP and WTB subject-matter experts jointly conducted consultations related to the 2.5 GHz proceeding and have partnered to execute the Commission's extensive outreach efforts to ensure all federally recognized Tribes are aware of and know how to participate in the rural Tribal Priority Window for new licenses in this band.

Using this same model, ONAP staff partners with subject-matter experts in other Bureaus and Offices to provide Native communities with training and consultation workshops, as well as additional outreach through participation in conferences and meetings involving Tribal governments. For example, ONAP and other FCC staff conducted four in-person Tribal workshops in 2019, participated in other Tribal workshops hosted by Tribal entities and attended numerous conferences and meetings with Tribal governments.

3. Chairman Pai, in previous auctions, the FCC has offered Tribal Lands Bidding Credits (TLBC) to incentivize auction winners to deploy broadband service to tribal communities. However, I understand TLBC have produced mixed results towards deployment throughout Indian Country.

    a. How exactly will the specific proposals for Tribal Governments and Tribal Lands in the new Rural Digital Opportunity Fund operate to achieve different results from those in the Connect America Fund? How will they differ from past proposals and aim to create a market for new provider entry?

RESPONSE: The proposed Rural Digital Opportunity Fund Order that the Commission will consider at its Open Meeting on January 30th would incorporate a Tribal Broadband Factor on Tribal lands, reflecting the unique challenges and costs of deploying broadband on Tribal lands. Similar to what the Commission previously adopted in its recent offer of model-based support to rate-of-return carriers serving Tribal lands, we seek to incentivize providers to bid on Tribal lands, and to ensure that Tribal Nations and their members obtain access to advanced communications services. Specifically, the draft Report and Order would reduce the eligibility threshold for homes and businesses on Tribal lands by 25%, which would have the effect of making more locations on Tribal lands eligible for support in the auction and would make more support available to the winning bidder to deploy broadband to those locations.

The Honorable Greg Walden (R-OR)

1. According to news reports, the FCC provided a written response to House Democrats with a letter detailing an update from the Commission regarding its probe of allegations certain carriers were selling wireless location information. A copy of this letter was not provided to the Minority. Please provide a copy of this letter to the Minority committee staff.

   RESPONSE: The response letter is public and can be found at: https://docs.fcc.gov/public/attachments/DOC-361280A4.pdf.

2. At a hearing earlier this year, I talked about attempts by foreign adversaries to disseminate false or misleading information about the health effects of 5G to slow U.S. deployment of 5G networks and other wireless technologies.

   a. To what extent is the FCC's coordinating with the FDA? How are you working together to determine the health effects, if any, of radiofrequencies from 5G?

   b. Is there a role the FCC could play in educating states, localities, and others to ensure wireless infrastructure decisions are not delayed or postponed unless they pose a true risk to human life or property?

   RESPONSE: On December 4, 2019, the Commission released an item that was approved by a unanimous vote and reiterated that existing RF standards fully protect the public's health. The item terminated an outstanding Notice of Inquiry, which sought information regarding the current RF exposure standards. It comprehensively outlined and reviewed the scientific and engineering data related to RF radiation exposure and provided the basis for our conclusion that no changes to the existing rules was warranted at this time. The item is accessible in its entirety at https://www.fcc.gov/document/fcc-maintains-current-rf-exposure-safety-standards.

   Also, as the item noted, the FCC relied on the FDA's biological and scientific data to analyze our RF exposure limits. In particular, the FDA stated, "[b]ased on our ongoing evaluation of this issue, the totality of the available scientific evidence continues to not support adverse health effects in humans caused by exposures at or under the current radiofrequency energy exposure limits. We believe the existing safety limits for cell phones remain acceptable for protecting the public health." FCC and FDA staff meet regularly to discuss various topics, including RF health effects and 5G.

   Moreover, the FCC has a robust and informative webpage devoted to these issues, and routinely provides information to consumers through individual inquiries. The FCC's Consumer and Intergovernmental Affairs Bureau regularly works with state and local governments to provide information as it is requested. For the past several years, the Wireless Telecommunications Bureau held annual workshops to assist interested parties in understanding antenna issues, including issues related to RF exposure.

   We also note that the Commission has publicly available materials though its equipment authorization knowledge database system relating to these issues which provide historical

guidance to local governments and consumers. In the recently adopted item, the Commission committed to evaluating those materials and to update them as appropriate.

3. I have expressed interest numerous times about ensuring the proper use of Mobility Fund-II funds. Indeed, the public nature of the inaccuracies in the maps initially used to consider funding awards for Mobility Fund-II were one of the driving forces for undertaking broadband mapping legislation that recently passed the House floor unanimously.

   On December 4, 2019, the Commission released a staff report ("Staff Report") finding that the 4G LTE coverage data submitted by providers was not sufficiently reliable for the purpose of moving forward with the Mobility Fund Phase II (MF-II).[1]

   a. What action will you take to ensure coverage maps used to inform the distribution of MF-II, or related, funds are accurate and verified?

   b. Will you commit to delaying any distribution of new funding without first consulting new, accurate broadband availability data?

   RESPONSE: Accurate broadband data is essential to bridging the digital divide. That's why in August of last year, the Commission adopted the Digital Opportunity Data Collection, the first significant reform to the Commission's current broadband mapping regime since 2013. It will collect granular, precise broadband service availability data for both fixed and wireless services. And for the first time, the FCC will incorporate crowdsourcing directly from consumers, allow state, local, and Tribal government and other entities to directly contribute to the map, and require validation of submitted coverage maps. The Digital Opportunity Data Collection was specifically designed to facilitate efficient use of finite universal service resources and ensure that all Americans have access to broadband no matter where they live.

   At the same time, in those areas where Commission data indisputably show that there is no service, it is imperative that we move forward with efforts to connect Americans living in those areas. For example, Phase I of the Rural Digital Opportunity Fund that the Commission will consider at its January meeting would provide up to $16 billion to connect up to an estimated six million rural homes and businesses that we already know lack broadband access. The draft report and order would allocate an additional $4.4 billion to connect those Americans currently living in partially served areas once the new broadband availability maps under the Digital Opportunity Data Collection become available.

   Finally, now that wireless providers are deploying 5G in urban America, I believe it is time to ensure that rural America gets the same opportunity. That's why I've announced my proposal for the 5G Fund, and I look forward to working with you and your staff to address your concerns about mapping in the coming months.

[1] *See*, "Mobility Fund Phase II Coverage Maps Investigation Staff Report," (GN Docket No. 19-367), rel. December 4, 2019. Available at: https://docs.fcc.gov/public/attachments/DOC-361165A1.pdf

4. To better understand the Commission's efforts with regard to the redirection of Mobility Fund-II dollars, and any new Universal Service Funding the Commission may be considering, please respond to the following questions.

   The MF-II Report and Order adopted a budget of $4.53 billion to carry out the MF-II over ten years.[2] The press release stated the Commission would, "make up to $9 billion in Universal Service Fund support available to carriers to deploy advanced 5G mobile wireless services in rural America," and, "would replace the planned Mobility Fund Phase II, which would have provided Federal support for 4G LTE service in in unserved areas."[3]

   a. Where does the Commission intend to make up the remaining $4.47 billion? Specifically, does the Commission intend on assessing new contributions? Will any funding come from other existing high-cost programs, Lifeline, or the Schools and Libraries fund?

   b. Where does the Commission intend to target this funding?

   c. If you do intend on assessing new contributions, did the Office of Economic Analysis conduct a cost-benefit analysis before making a recommendation that led to your determination to require new contributions to fund this new 5G fund?

   d. Who will be eligible to receive funding from the 5G Fund?

   RESPONSE: As you noted, I announced just last month my intention to propose a new 5G Fund to the full Commission that would allocate up to $9 billion in high cost universal service support over the next decade to spur deployment of mobile 5G broadband to rural areas that are unlikely to receive those services without federal support. In order to move forward with the 5G Fund, the Commission will need to resolve many issues, including the ones you raise, through the notice and comment rulemaking process, giving the full Commission the opportunity to consider stakeholders' views on these important questions.

   Thanks to the Commission's prudent management of the Universal Service Fund in recent years and the anticipated use of a reverse auction mechanism that could reduce the amount of support actually awarded well below the full budget allocated for the program, I expect the effect of the 5G Fund on consumers would be minimal, and other than the $4.53 billion allocated to the Mobility Fund II, there would be no need to repurpose funding from existing universal service programs.

   The final amount of the 5G Fund budget, as well as questions of where funding will be targeted and which providers will be eligible to receive support, will be part of an upcoming Notice of Proposed Rulemaking. The Commission's focus in the high cost program has been

[2] *See*, "In the Matter of Universal Service Reform – Mobility Fund," Report and Order and Further Notice of Proposed Rulemaking, (WT Docket No. 10-208), Rel. March 7, 2017. At para. 23. Available at: https://docs.fcc.gov/public/attachments/FCC-17-11A1.pdf

[3] *See*, Press Release, "Chairman Pai Announces Plan to Launch $9 Billion 5G Fund for Rural America," December 4, 2019. Available at: https://docs.fcc.gov/public/attachments/DOC-361168A1.pdf

on providing support to primarily rural areas that would otherwise not receive the most advanced services absent universal service support. The Commission will propose and seek comment on rules that encourage robust participation in the 5G Fund auction by entities that have access to the wireless spectrum necessary to meet 5G service performance obligations in the areas on which they bid.

5. The Precision Agriculture Connectivity Act of 2018 (P.L. No. 115-334) requires the Precision Agriculture Connectivity Task Force ("Task Force") to "develop policy recommendations to promote the rapid, expanded deployment of broadband Internet access service on unserved agricultural land, with a goal of achieving reliable capabilities on 95% of agricultural land in the United States by 2025."[4] In the announced 5G Fund plan, you propose $1 billion dollars for precision agriculture. Do you intend on making these funds available prior to receiving the recommendations as described in the bill?

   a. Will entities eligible for support under the proposed 5G Fund be eligible for funds made available for precision agriculture?

   RESPONSE: We're at a revolutionary moment for American farmers and ranchers who feed the world, and the important work of the Task Force will help shape that connected future. The Task Force will play a critical role in assessing connectivity needs and demand, accelerating deployment on unserved agricultural lands, and promoting adoption of these broadband-based technologies.

   As part of the 5G Fund Notice of Proposed Rulemaking, I expect the Commission will seek comment on a timeline for the announced 5G Fund, including on the ways that the 5G Fund can realize the greatest benefit of the Task Force in facilitating and promoting adoption of precision agriculture technologies. The notice-and-comment process will also give the Commission the opportunity to address other questions like which entities will be eligible to participate in either, or both, phases of the 5G Fund.

6. On March 23, 2018, the FCC released a Sixth Further Notice of Proposed Rulemaking relating to Public Safety use of the 4.9 GHz band ("NPRM").[5] The NPRM noted, "with no more than 3.5% of potential licensees using the band, we remain concerned that, as the Commission stated in 2012, the band has 'fallen short of its potential.'"[6]

   a. Given a robust record demonstrating the underutilization of this band due to the current licensing regime, what actions is the Commission taking to ensure the 4.9 GHz spectrum is being utilized effectively by public safety?

   b. When will the Commission take action on the 4.9 GHz band? Will you commit to take action before the end of 2020?

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[4] 7 U.S.C. 12511(c)(B)

[5] *See*, "In the Matter of Amendment of Part 90 of the Commission's rules, Sixth Further Notice of Proposed Rulemaking, (WP Docket No. 07-100) FCC 18-33. Rel. March 23, 2018.

[6] *Id*., at para. 1.

c. As I stated at the hearing, ending diversion of 9-1-1 fees is a priority for me. According to recent reports submitted to Congress pursuant to the New and Emergency Technologies 9-1-1 Improvement Act of 2008,[7] states and taxing jurisdictions are still diverting 9-1-1 fees for purposes other than 9-1-1. What statutory tools would be useful for the Commission to stop States from diverting 9-1-1 fees? What legislative recommendations, if any, do you have to end this practice?

RESPONSE: The Commission is committed to ensuring that the 4.9 GHz band is used effectively and efficiently. You are right that this band, due to a lack of compatible equipment, is currently underused, and expanding commercial access to the band could both improve the use by public safety entities and create further opportunities for 5G expansion. That's one reason why I hope to move forward in this proceeding later this year.

I also agree with you that ending 911 fee diversion should be a national priority. At the Commission, Commissioner O'Rielly has consistently and effectively used the bully pulpit to reduce such diversion, and I support his efforts. Congress has a variety of potential options for encouraging the end of these practices—from conditioning funding on the end of such practices to the prohibition on voice service providers collecting and remitting 911 fees in diverting states—each with its own costs and benefits. I am happy to arrange a further briefing with our staff on this issue if you would like.

7. On August 2, 2019, the Commission announced it was proposing a $20.4 Billion Rural Digital Opportunities Fund (RDOF).[8] While I appreciate the goal of supporting high-speed broadband networks in rural America, I have questions as to how the Commission intends on moving forward. The RDOF represents the first time the Commission will be explicitly replacing ILECs in their territory without their voluntary agreement. How does the Commission intend on dealing with the legacy obligations ILECs have?

   a. What steps does the Commission intend to take to ensure bidders are sufficiently vetted for performance capabilities to deliver on their obligations?

   b. I understand some providers, big and small, have said that it would take several million dollars to obtain a Letter of Credit, and may limit their ability to participate in the auction. Do you find that the current Letter of Credit proposal strikes the right balance? If so, why?

RESPONSE: As you know, the Commission will consider final rules to launch the new $20.4 billion Rural Digital Opportunity Fund at its January 30 Open Meeting. It would use competitive bidding to target up to $20.4 billion over ten years to support up to gigabit speed broadband networks in areas that lack access to 25/3 Mbps broadband service and connect the most Americans in a cost-effective manner. Under the draft Report and Order, legacy

[7] 47 U.S.C. 615a-1, *et seq*.

[8] *See*, "In the Matter of Rural Digital Opportunity Fund," Notice of Proposed Rulemaking, Re. August 2, 2019. (WC Docket No. 19-126). Available at: https://www.fcc.gov/document/fcc-proposes-204-billion-rural-digital-opportunity-fund-0

price cap carriers would be required to continue offering voice service until they receive discontinuance authority under section 214(a) of the Act and will remain subject to eligible telecommunications carrier (ETC) obligations unless or until they relinquish such designations in those areas pursuant to section 214(e)(4).

Before being qualified to receive support in the Rural Digital Opportunity Fund Phase I auction, an applicant would be required to establish its eligibility by demonstrating its financial and technical ability to provide voice service and broadband at its proposed speed and latency. This process would be similar to the approach the Commission used in 2017 for the successful Connect America Phase II auction.

The proposed letter of credit requirements provide important protections for the taxpayers that fund universal service program support, with reduced burdens on participants. In the Connect America Fund Phase II auction, the Commission found that requiring bidders to obtain an irrevocable standby letter of credit covering the amount of support disbursed to a recipient was an effective means to safeguard the universal service funds. It also found that the requirement did not deter broad participation in the auction, which awarded $1.488 billion in support to 103 winning bidders—and, as of December 2019, nearly 90% of carriers have already secured valid letters of credit and been authorized to receive support. Nevertheless, I have heard your concerns, and we are looking into additional steps that would further reduce the burdens on recipients while still retaining substantial public benefits, such as allowing a support recipient to further reduce the amount of its letter of credit as it deploys its network, while still allowing the Commission to quickly and efficiently recover support in instances where the recipient does not fulfill its obligation to deploy broadband.

The Honorable Robert E. Latta (R-OH)

1. Closing the digital divide is a top priority of mine, and that means using all technologies at our disposal to achieve this task. Could you explain how you plan to make spectrum sharing available for rural broadband deployment?

   RESPONSE: I share your commitment to closing the digital divide. Indeed, my top priority since becoming Chairman of the FCC has been to bridge the digital divide—particularly in rural areas where broadband is insufficiently deployed. This FCC has taken an "all of the above" approach to meet this objective by creating a regulatory environment that provides current and potential technologies opportunities to flourish.

   Wireless technology offers significant promise for closing the digital divide, as it is often the most cost-efficient means of deploying broadband service to rural and hard-to-reach areas. Under my 5G FAST Plan, the FCC is taking action to make additional low-, mid-, and high-band spectrum available for flexible-use services, including broadband.

   With regard to spectrum sharing, the Commission has established a framework for the 3550-3700 MHz band (the 3.5 GHz band) that will provide spectrum-sharing opportunities in rural and remote communities across the country. The Citizens Broadband Radio Service, as the 3.5 GHz band is sometimes referred to, is a novel, three-tiered access and authorization framework designed to accommodate shared federal and non-federal use of the band. Federal incumbent users represent the highest priority tier. Next are Priority Access Licenses (PALs); these are 10-year, county-based licenses of 10-megahertz channel blocks that receive protection from General Authorized Access (GAA) users, the third tier. The GAA tier is licensed-by-rule to permit access to the full 3.5 GHz band, with at least 80 megahertz in any given license area available to potential GAA users and not available to PAL users. Automated frequency coordinators, known as Spectrum Access Systems, will coordinate operations among GAA and PAL users, as well as incumbents.

   The FCC approved full commercial deployment in this band earlier this week, allowing users to access this spectrum through GAA use. The Commission recently sought comment on bidding procedures for an auction of PALs in the 3550-3650 MHz segment of the band that will commence on June 25, 2020. The 3.5 GHz band's opportunistic access regime and smaller geographic license areas provide low-cost entry points to mid-band spectrum and another key opportunity for deployment of advanced wireless services to rural and remote areas, including Tribal lands.

   The Commission is continuing to explore ways to make more spectrum available for rural broadband.

2. We often talk about illegal robocalls and how we are acting to stop them, but we also need to discuss legitimate uses of robocalls. This includes calls that consumers actually want and need, like prescription reminders, fraud alerts, and school closings. Do you believe legitimate businesses face barriers today to place calls that benefit consumers, and what is the FCC doing to ensure these important notifications don't get blocked?

RESPONSE: We understand the concerns raised by those who make legitimate calls and addressed the issue in our June 2019 Declaratory Ruling. In particular, we made it clear that any reasonable call-blocking program offered by default must include a mechanism for allowing legitimate callers to register a complaint and for having that complaint resolved. And we encouraged providers to develop a mechanism for notifying callers that their calls have been blocked. Additionally, callers who believe their calls have been unfairly blocked also have the option to file a petition for declaratory ruling at the Commission. Ultimately, it is our belief that our actions will increase call completion rates for legitimate calls because consumers will be more willing to answer their phones once there is a reduction in the number of illegal and unwanted robocalls through blocking facilitated by the SHAKEN/STIR call authentication framework.

3. The Federal Communications Commission has found on three separate occasions that an absolute ban on newspaper/broadcast cross-ownership is not necessary to serve the public interest and that, to the contrary, cross-ownership fosters local journalism without harming diversity or competition, a finding which was affirmed by the Third Circuit Court of Appeals in 2003. Now, the same court has blocked the FCC from repealing this cross-ownership ban by vacating and remanding the Commission's recent Reconsideration Order modernizing a number of media ownership regulations.

   The Court has now blocked the repeal of the 1975 cross-ownership ban three times over the last 15 years. Because this outright ban has been reinstated, it has been reported that the new owners of the Dayton Daily News will be forced to reduce the number of days the printed newspaper is circulated in Dayton from 7 to 3 days in order to comply with definitional parameters of the regulation. This concerns me as citizens in my state will receive less news and information about what is going on in their community. Our democracy depends upon an informed citizenry.

   Will you continue to push for the repeal of this outdated rule that has been in place now for more than four decades?

   RESPONSE: Yes. We will continue to work to bring all of the media ownership rules into the 21st century. In particular, the newspaper-broadcast cross ownership ban is a perverse rule that has no credible justification anymore. As you note, the consequence of the Third Circuit's decision is apparent with the likelihood that entities will reduce local news coverage in order to comply. This outcome is particularly unfortunate given that a purported intent of challenging the Commission's 2017 decision was to protect and promote consumer access to quality local news and information. However, the Media Bureau recently granted an extension request filed by Terrier Media to allow it to operate the Dayton newspapers with daily circulation for an additional 60 days as it completes a process to sell the newspapers to an unaffiliated buyer.

4. As the author of the Precision Agriculture Connectivity Act that was included in last year's Farm Bill, I am interested in the economic benefit of GPS to the agriculture sector. Talking to farmers in my district, I know GPS can improve farm planning, field mapping, soil sampling, tractor guidance, crop scouting, variable rate applications, and yield mapping. All this innovation relies on connectivity, including that provided by GPS. How will the Commission continue to protect GPS services from harmful interference?

   RESPONSE: The Commission appreciates the many important benefits derived from GPS which includes the kinds of agricultural sector benefits that you point out. In carrying out our spectrum management responsibilities, the Commission consistently weighs the potential impact of new spectrum uses against the potential for harmful interference to incumbent systems such as GPS. As we continue to evaluate and approve new spectrum uses through our open and transparent rulemaking and licensing processes, the Commission is committed to resolving concerns of harmful interference to GPS.

The Honorable John Shimkus (R-IL)

1. I want to say thank you on a number of items including your work on improving the ability of first responders to determine a more accurate dispatchable location in multi-story buildings, and for helping to deploy broadband to my rural district, both directly through USF, and for working to coordinate with the Department of Agriculture's Rural Utility Service to help address the 'overbuilding' issue.

   On that front, though, On December 13, 2018, the Federal Communications Commission (FCC) adopted a *Report and Order* to revise the amount of support available for rural telephone companies that receive Alternative Connect America Model (A-CAM) support to deploy broadband in high cost areas. I have a rural provider in my district, Hamilton Communications, that has had significant challenges accessing these critical broadband supports, so I was curious about your rational for the revision?

   RESPONSE: I appreciate the kind words for the work our staff has done to promote public safety and rural broadband, as well as your leadership over many years on these issues.

   In 2016, the Commission adopted a voluntary path to model-based support, which would provide high-cost universal service support in unserved census blocks for rural telephone carriers called the Alternative Connect America Cost Model (A-CAM). Pursuant to a challenge process, Hamilton Communications disputed the claims by a competitor that it served certain areas (which caused 2,444 locations in Hamilton's service territory to be ineligible for A-CAM). The Wireline Competition Bureau reviewed the record and ultimately denied Hamilton's challenge. Hamilton did not seek further review of the Bureau's decisions, elected to accept the offered support, and was authorized to begin receiving model-based support in 2017 for the eligible areas.

   Subsequently, the Commission made additional model-based support available within eligible areas in return for additional commitments from carriers for broadband deployment at higher speeds, each of which Hamilton accepted. Hamilton sought reconsideration of the additional funding made available in March 2018. In December 2018, the Commission denied several petitions for reconsideration, including Hamilton's. Hamilton had not requested review of the Bureau's 2016 decision within the time allowed by the Commission's rules, and the Commission separately concluded that Hamilton had not provided new evidence the Commission could consider.

The Honorable Adam Kinzinger (R-IL)

1. The Chairman announced just before the Thanksgiving break that the Commission will proceed with a public auction to repurpose 280 MHz of the C-Band. While there was a lot of debate about how the FCC was going to proceed on this band, there was one principle that seemed to be universal—these proceedings need to occur as quickly and efficiently as possible. I personally was open to either mechanism as long as we held to this principle of doing things quickly, plus one other principle—that substantial revenues be raised for the Treasury, hopefully for rural broadband deployment and similar programs.

   During the hearing, I asked Chairman Pai the following questions:

   Given that most stakeholders estimate a public auction will take longer than a private sale, what can Congress do to help speed up this public auction?

   Does the FCC need new authorities, or new appropriations to hire temporary staff or speed up the auction software procurement process?

   While the Chairman provided thoughtful answers in response, I ask that the Commission follow up with the Committee to offer any supplemental information or ideas in terms of new authorities or appropriations that would assist in expediting the C-Band Auction, including the process of preparing for the auction and perhaps the auction itself. Please be as detailed as reasonably possible.

   RESPONSE: We appreciate the authority that Congress has granted us to repurpose this spectrum for 5G use and believe that authority is sufficient for the Commission to achieve its goals in this proceeding. The Commission will work with the Congress and the Committee if and when any resource issue arises but do not believe that any resource issues will prevent us from launching the C-Band auction by the end of 2020.

2. I appreciate the work the Commission has done on the 24 GHz band in the months leading up to the World Radio Conference (WRC). You may recall I asked you all about 24 GHz band back in the hearing earlier this year. And when Mr. Knapp was here in July, I also expressed my concerns that the government was not speaking with one voice on making the 24 GHz band available for 5G services. Mr. Knapp told me he was confident that 5G and weather services can coexist given the 250 MHz guard band. The work you and your team did, and continues to do, is important and critical as we move closer to a 5G world.

   Now that there is an agreement on the protection values—and these values, which were agreed to at the WRC but are different from that contained in the FCC rules—will the FCC open a proceeding to adopt these new protection parameters? If not, then what will the FCC be doing to protect these critical passive weather sensors from harmful 5G interference?

   RESPONSE: After the conclusion of every WRC, the Commission's standard practice has been to open a rulemaking proceeding to amend our rules as appropriate in response to the decisions reached at the conference. As the Commission is legally obligated to base our rulemaking decisions on the record developed, I cannot predict what commenters might file in response to the proposed rule changes or what resulting decision the Commission may

ultimately make. However, I am confident that the Commission's decision will be based on the law and sound science and engineering and will adequately protect the passive weather sensors.

3. Each time the FCC announces plans to repurpose spectrum bands, stakeholders come to Members of this Committee and the Commission alike to express concerns about the potential for interference—or "harmful interference", the legal standard to which the FCC is bound to prevent. I think in most cases, these concerns come from a good and well-intentioned place. After all, we have to ensure that consumers, who are our constituents, are not subject to outages or major service disruptions. And in other cases—such as spectrum bands that are used for critical infrastructure, public safety, or national security, including spectrum adjacent to those bands—the concerns are greater because any harmful interference would have grave consequences. The FCC has had to tackle numerous challenges in which repurposing spectrum requires incredibly difficult engineering choices.

   Can you offer an overview of the Commission's track record on this front, at least in recent decades?

   Do you have any knowledge of the FCC's engineers making miscalculations that, after the Commission took action to reorganize spectrum, resulted in harmful interference?

   a. If so, can you describe what impacts this interference had on equipment or service operating in the band, and what actions the Commission took to remedy the harmful interference?

   b. If not, would you posit that stakeholders should look to this track record to ease concerns about the Commission's future plans for spectrum reorganization?

   RESPONSE: The Commission has a strong track record of successfully repurposing multiple spectrum bands resulting in new and more efficient operations that successfully co-exist with other spectrum users. Just a few examples include re-farming the private land mobile radio bands, enabling new mobile services by taking advantage of the digital dividend created by the transition from analog to digital television, repurposing spectrum to enable advance wireless services which currently support 4G and soon 5G networks, and more recently the further repurposing of spectrum from television to mobile broadband through our incentive auction and the opening of millimeter wave bands for new 5G services.

   There have not been, to my knowledge, any instances of engineering miscalculations that resulted in widespread harmful interference. In any spectrum reallocation or repurposing effort, there is always a possibility that some instances of harmful interference could arise. However, the Commission takes great care to ensure that such instances are rare and if they do occur, that a remedy can be effectively implemented. The Commission takes any report of harmful interference seriously, and we note that throughout the reallocation and repurposing efforts listed above, reports of harmful interference have been extremely limited, small in scope, and quickly addressed. When evaluating any proposal to repurpose spectrum, the Commission considers the frequency characteristics, the existing and anticipated uses of the band, and the technical data submitted during the open rulemaking process. We

recognize that predicting whether harmful interference will occur is a complex undertaking and the nature of radio propagation makes it impossible to guarantee that interference will never occur - even in frequency bands with long-established uses and well-known transmission characteristics. Accordingly, the Commission is always mindful for the potential for unanticipated harmful interference and ensures that its relocation decisions and procedures are carefully tailored to account for the nature of the particular band under consideration Our long and successful experience with spectrum repurposing should give stakeholders confidence that the Commission's process and spectrum decisions provide the proper balance between protecting existing uses and enabling new uses.

4. During the hearing, I asked Chairman Pai the following questions:

   Are there cybersecurity or physical security concerns if information and communications technology companies allow non-cleared or un-vetted personnel access to software development kits or application programing interfaces for 5G networks?

   Is there a common standard to use vetted personnel, AI, or machine learning to analyze source code that will be distributed or used in patches for software updates of 5G equipment?

   While the Chairman provided thoughtful answers in response, I ask that the Commission follow up with the Committee to offer any supplemental information or ideas regarding the ways in which the Commission, using existing authorities, or Congress, by enacting new legislation, can bolster the physical security and cybersecurity of our 5G networks. Please be as detailed as reasonably possible, and if the Commission feels that these responses are best conveyed to the Committee in a confidential manner in order to protect our national security, please indicate as much to the Committee and we will work with you all to make appropriate arrangements.

   RESPONSE: Thank you for understanding that responding to your questions is somewhat difficult in a public setting. I have asked our Public Safety and Homeland Security Bureau to reach out to your staff to arrange a confidential briefing.

The Honorable Bill Johnson (R-OH)

1. As you know, access to reliable broadband internet is no longer a luxury, it is essential in today's society. The digital divide has left millions of Americans living in rural communities deprived of the same economic, educational, health, and agricultural opportunities available in better connected areas. To tackle this challenge and ensure every American benefits from the many incredible advancements and opportunities made possible by technology in our digital age, we must follow an all-of-the-above approach to expanding broadband connectivity. I applaud the Commission for its dedication to bridging the digital divide and the initial steps taken to support TV white space technology. However, additional steps must be taken to unleash innovation and expand broadband deployments in rural areas, including leveraging TV white spaces spectrum to enable connected school buses, ambulances, and IoT, such as precision agriculture. One way the Commission can assist is by issuing a Further Notice of Proposed Rulemaking (FNPRM) to update rules that impact TV white space deployment in rural areas and clear regulatory barriers to bridge the digital divide.

   Please share the status and timing of the TV white space petition which proposes additional rules. When do you anticipate adopting the Further Notice?

   RESPONSE: The Commission has worked and continues to work toward ensuring that White Space devices are positioned to offer providers flexibility in designing networks to reach end users especially in rural and underserved areas. In our continuing efforts along these lines, we are evaluating a petition that seeks several rule changes to facilitate broader deployment of white space devices in rural areas and for the Internet of Things applications. Commission's staff has reviewed the comments and reply comments on the petition and is working on a Further Notice of Proposed Rulemaking that would explore the requested changes. I am aiming to circulate an item in near future.

The Honorable Tim Walberg (R-MI)

1. I represent the seventh district of Michigan, the energy district of Michigan. You are considering making the 6 GHz band, which utilities rely on for devices on the grid, available for unlicensed use. You've spoken about the need for the band to meet growing demand for next generation technologies in 5G

   a. I know that you are working with all stakeholders to understand what interference within the 6 GHz band could exist in the indoor low power frequency space and that those discussions have been positive. Given the technical record so far at the Commission are you optimistic that the Commission can enable unlicensed use while protecting incumbents like electricity from harmful interference?

   b. As we saw with the repack that was envisioned under the 2012 Spectrum Act, the time estimates for 39 months has been questioned given the complexity of moving over 950 earth stations. With thousands of those stations, and others, how confident are you that we can complete a C-Band auction in 2-3 years?

   c. On December 4, 2019, you announced $9 billion for a new 5G fund for Rural American. Can you talk about how this initiative will be funded? While there is great opportunity for 5G technologies to benefit my constituents, I want to make sure we are mindful of costs on their bills.

RESPONSE: I am pleased at the high level of engagement we have seen by both proponents of unlicensed use of the 6 GHz band and incumbents in the band. These stakeholders have created an extensive technical record that our engineering staff is currently analyzing. As I have stated in the past, to the extent that the 6 GHz band is opened for unlicensed use, the Commission is committed to protecting incumbents in the 6 GHz band from harmful interference.

The Commission has sought to chart a path forward on repurposing the C-Band that achieves my four guiding principles: 1) make available a significant amount of spectrum for 5G; 2) make this spectrum available for 5G quickly; 3) generate revenue for the federal government; and 4) ensure that the services currently using the C-Band will continue to be delivered to the American people. The Commission's auctions team has a long history—25 years—of designing and implementing spectrum auctions to promote the development and deployment of new technologies, including numerous instances where doing so requires innovative approaches to solve complex transition issues. Our goal is to start the auction before the end of 2020. We recognize the intensive interest from providers in the C-Band and will do everything we can to streamline the process of preparing for bidding to ensure it happens as soon as possible.

As you noted, just last month I announced just my intention to propose a new 5G Fund to the full Commission that would allocate up to $9 billion in high cost universal service support to spur deployment of mobile 5G broadband to rural areas are unlikely to receive those services without federal support. I agree that these services will provide much-needed benefits to rural Americans by connecting them to digital opportunity through the networks of tomorrow.

The Commission previously allocated $4.5 billion for the Mobility Fund II program, which I will propose to repurpose from supporting 4G LTE services to support the 5G Fund. And thanks to the Commission's prudent management of the Universal Service Fund in recent years and the anticipated use of a reverse auction mechanism that could reduce the amount of support actually awarded well below the full budget allocated for the program, I anticipate the modest spending increase will have minimal impact on for consumers.

In order to move forward with the 5G Fund, the Commission will need to resolve many issues, including the ones you raise, through the notice-and-comment rulemaking process, giving the full Commission the opportunity to consider stakeholders' views on these important questions.

Committee on Appropriations
Subcommittee on Financial Services and General Government

Hearing on the FY2021 Budget Request for the Federal Communications Commission
March 10, 2020

Subcommittee Questions for the Record

(Majority Questions)

Questions from Chairman Kennedy (LA)

1. In 2019, the FCC issued its 18-155 order to curb access arbitrage and to resolve access rate differences most acutely found between long distance providers and conferencing service providers. However, those disputes seem to still exist as there are numerous stays and legal challenges to the order. Furthermore, as a result of the implementation of the order, we understand that considerable traffic has been shifted from the rural areas that were a focus of the order to nationwide carriers, but this traffic shift has created network congestion and call failures.

   Do you consider traffic shifts as an intended or unintended consequence of the order?

   a. What time frames and carrier network considerations were assessed to ensure this shift to be successful and mitigate service disruptions?

   b. You issued an order that dramatically changed the economics of call routing. Did you assume traffic would not shift?

   RESPONSE: In 2011, when the Commission comprehensively reformed the nation's intercarrier compensation system, the Commission also adopted rules to address the abuse of those intercarrier charges through access arbitrage. The Commission made clear that such arbitrage schemes were not in the public interest because they shifted the costs for conference calling services to all long distance customers, most of whom never used the conference calling services that were being given away to users of those services for free. Notwithstanding these rules, companies continued to find ways to game the intercarrier compensation system.

   To address this continuing concern, last year the Commission unanimously adopted an order to make local exchange carriers engaged in wasteful access arbitrage responsible for the costs of having calls delivered to them. When that order was adopted, the Commission expected that providers of high-volume calling services, such as conference calling, and their access-stimulating local exchange carrier partners would likely need to change their business model. Instead, it appears that access arbitrageurs are trying to circumvent the new rules by changing their routing practices in an attempt to continue to obtain implicit subsidies from long distance consumers. The calls are still nominally bound to phone numbers originally assigned to carriers providing service in rural areas, but in some instances, the arbitrageurs abruptly changed the locations where they want traffic delivered, picking spots with insufficient capacity to handle the increased load. In other instances, the arbitrageurs changed their routing practices to attempt to require the long distance carrier to bring traffic for conference calls and other non-geographic

specific services (as opposed to residential and business customers located in a specific geographic area) all the way to the remote location where the access stimulating carrier is located, in an attempt to avoid the costs of their inefficient routing decisions.

Routing changes occur all the time in our nation's telecommunications networks and industry practice and procedures—and sometimes contracts negotiated between particular carriers—provide for the seamless completion of those changes. Those practices ensure that adequate notice of network changes is given to all carriers that will handle traffic on the affected routes and sufficient time is allowed so that adequate facilities are in place or constructed to handle anticipated calling volumes. It appears as though access arbitrageurs changed the routing of calls outside of these practices for the purpose of using the facilities of affiliated companies and perpetuating the implicit subsidies that Congress has directed the Commission to eliminate—all too often without regard for the impact of such actions on consumers. The Enforcement Bureau has already received an informal complaint on these issues and is reviewing next steps.

2. We also understand that there have been significant call failures since the implementation of the order and that continue to occur on daily basis. As I'm sure we can both agree, call completion is critical to the integrity of our telephone system, with numerous Commission rules addressing call completion requirements.

   What is the Commission currently doing to address ongoing call failures to the carriers and conferencing service providers affected by the order?

   a. Can you assure me that long distance providers, such as AT&T, complete <u>all</u> calls to conference service providers, like FreeConferenceCall?

   <u>RESPONSE:</u> We agree that call completion is very important to ensure the continuing confidence of all Americans in our communications network. We understand that as a result of the actions of high-volume calling providers and their access-stimulating local exchange carrier partners, attempts have been, and are being, made to re-route calls to avoid the financial consequences of the Commission's 2019 *Access Arbitrage Order*. These actions may also be attempts to use facilities of corporate affiliates of access arbitrageurs to unjustly enrich firms that continue to engage in access arbitrage, despite the Commission's clear guidance that such activity violates the public interest.

   If high-volume calling providers believe they have a legitimate grievance with another service provider, the Commission's Enforcement Bureau stands ready to adjudicate all complaints brought before them to ensure compliance with the Commission's rules and carriers' statutory obligations, including our access arbitrage rules and our call completion rules.

   The Commission's Consumer and Governmental Affairs Bureau collects consumer complaints and during the first three months of this year received only six complaints from consumers about difficulty reaching a free conference calling service.

3. We are all living in highly uncertain times, with the Coronavirus pandemic affecting ordinary, everyday life. It has been reported that conferencing service providers like Google, Zoom, and FreeConferenceCall are all seeing significant increases in demand for

their free services as a result of this crisis, along with the reduction of travel and increase in social distancing becoming more prevalent.

What is the Commission doing to ensure that the public switched telephone network and its carrier participants are prepared for the uncertain, increasing demands for increased remote work and crisis coordination?

a. Can you provide assurances that the increase demands on the telephone network will be accommodated without disruption to these critical services?

RESPONSE: Our nation's communications networks, including the public switched telephone network, have performed well throughout the pandemic. I have encouraged each of the major industry associations to report directly to the public on the impacts they're seeing on their networks from the mass-migration to telework, remote learning, and telehealth, and I have directed Commission staff, in coordination with the Department of Homeland Security's Cybersecurity and Infrastructure Security Agency, to regularly speak with senior officials of the major communications providers as well as several industry associations. I personally have also held many virtual meetings with broadband and telephone service providers and the trade associations that represent them to discuss these issues.

The agency has granted many special temporary authority (STA) emergency applications to expand access to radiofrequency spectrum resources in support of increased broadband usage. The FCC has granted STAs to AT&T, Sprint, T-Mobile, U.S. Cellular, and Verizon, to over 100 wireless Internet service providers that provide service in rural communities, as well as others, such as those serving the Zuni Pueblo in New Mexico. The Commission continues to process additional STA applications and will work to maximize flexible use of available spectrum resources during the pandemic to support mobile voice and broadband connectivity.

Finally, the Commission also granted a temporary waiver of its access-arbitrage rules to Inteliquent, a competitive local exchange carrier that originates interstate traffic for large, enterprise customers and terminates traffic for other clients, including two of the best known conference calling providers in the United States—Zoom Video Communications and Cisco WebEx. As a result of the COVID-19 pandemic, Inteliquent's preexisting customers are helping to facilitate the massive shift to telework and distance learning. This shift materially altered Inteliquent's normal mix of originating and terminating traffic, such that Inteliquent would likely fall under the Commission's "Access Stimulation" definition even though it is not behaving like an access arbitrageur, which would have triggered significant financial consequences for Inteliquent if it did not receive a waiver. The temporary waiver will allow Inteliquent to continue to provide telecommunication services to its conferencing provider customers (like Zoom and Cisco WebEx), which in turn will enable them to continue to provide critical services to their customers including some of the country's largest universities, healthcare institutions, and non-profit organizations.

4. When you issued the access arbitrage order, you said "You've probably heard the expression, there's no such thing as a free lunch. As it turns out, there's no such thing as a free conference call." However, through this crisis, it is becoming clear just how

valuable unrestricted access to these tools are for the coordination of resources through a crisis as well as to the continuity of our everyday life.

Do you still stand by your statement?

RESPONSE: This crisis has given us all a stark reminder how important communications is in our daily lives, and in particular how important telecommunications is during this time when physical contact is so restricted. The Commission will do everything it can to ensure that our telecommunications networks function efficiently and effectively. That is why we will grant waivers of our rules when it is justified and is in the public interest to do so, and why more than 700 companies have signed our Keep Americans Connected pledge to help ensure that all Americans have the communications tools they need at this critical time.

All of that does not mean, however, that the wasteful practice of access arbitrage suddenly becomes legitimate. More than ever, arbitrageurs' attempts to subsidize their own profits on the backs of unsuspecting, hardworking American consumers are against the public interest. And yes, there is still no such thing as a free conference call. Someone still must pay the costs associated with such a call. The only question is who that will be.

5. Mr. Chairman, incumbent licensees, such as refineries, utilize 900 MHz spectrum to carry out day-to-day operations and during emergency situations as part of their emergency response communications plans to protect the surrounding communities and the workers at these facilities, including in my home state of Louisiana. I understand the rule is likely to be finalized soon, but with no clear plan for relocation and protection of incumbents. I worry about this rule being finalized without a clear path forward.

   Can you share how the FCC plans to protect incumbent users of 900 MHz spectrum so that they can, in turn, protect the safety of the surrounding communities?

   a. Will the FCC have a clear plan in place to provide for the protection of incumbents, prior to finalization?

RESPONSE: The 900 MHz band (896-901/935-940 MHz) currently is designated for narrowband land mobile radio communications by Business/Industrial/Land Transportation licensees and Specialized Mobile Radio providers. These radio systems provide communications networks to support the day-to-day operations of a wide variety of the nation's businesses, including such industries as refineries, land transportation, utility, manufacturing, and nuclear. While 900 MHz licensees may continue to rely on narrowband deployments to satisfy a variety of communications needs, some 900 MHz licensees will require additional coverage and capacity to keep pace with the expanding need for enhanced connectivity.

I have recently proposed to my colleagues a Report and Order to reconfigure the 900 MHz band for the deployment of broadband services and technologies. The new regulatory framework would allow 900 MHz licensees, like utilities, to obtain broadband licenses and would include operational and technical rules to minimize harmful interference to narrowband operations. The FCC will be voting on this Order at our May

Open Meeting. The draft Report and Order is available at https://docs.fcc.gov/public/attachments/DOC-363915A1.pdf.

Questions from Senator Daines (MT)

1. The next big bargain you will need to find compromise on will be the 6Ghz band. It is my understanding that the commission is looking at using this band for unlicensed uses such as gigabit WiFi and others that could be the next generation of at home connectivity. This is a big swath of spectrum that is important if the U.S. wants to continue to lead on connectivity and the 5G economy. If we are going to reach rural communities in Montana we are going to need every tool available: unlicensed, licensed, low-band, mid-band and more.

   a. Can you give me an update on the commission's work to free up more spectrum to reach our rural communities?

   RESPONSE: My top priority continues to be to close the digital divide so that every American, including those living in rural areas, enjoys the benefits of 5G and other advanced wireless services. In my March 10, 2020 testimony, I updated you on the execution of the FCC's 5G FAST Plan, which has already made an unprecedented amount of spectrum available for commercial, flexible wireless use, promoted wireless infrastructure, and modernized regulations to encourage fiber deployment. I reported on the three auctions conducted during the prior 16 months, where we made available almost five gigahertz of high-band spectrum for commercial use, as well as our adoption of rules for the C-band auction, which will provide much-needed mid band spectrum. And at our February Open Meeting, the Commission adopted a Notice of Proposed Rulemaking updating its white space rules to expand rural connectivity.

   During our April Open Meeting, the Commission addressed the 6 GHz spectrum you mention. This decision makes a contiguous 1,200 megahertz spectrum block available, enabling the use of very wide bandwidths that support high data rates. The innovative technologies and services that are poised to make use of this band will advance the Commission's goal of making broadband connectivity available to all Americans, especially those in rural and underserved areas. In particular, 850 megahertz of that spectrum could be used for outdoor deployments by wireless Internet service providers, schools, and businesses in rural communities.

   I appreciate your continued support for the Commission's all-of-the-above approach to spectrum, and I look forward to continue working with you on this issue.

2. How much spectrum has been and is expected to be cleared for 5G wireless communications? Is it on par with other countries? Outside of licensed spectrum for wireless communications, what else will spectrum be needed for in order for the U.S. to lead in the new 5G economy?

   RESPONSE: The FCC's 5G FAST Plan will help ensure the United States' position as the worldwide leader in the 5G economy. During the past two years, we have conducted three auctions in which we made available almost five gigahertz of high-band spectrum for commercial use. We are also making licensed mid-band spectrum available for 5G. For example, we have authorized commercial deployments in the 3.5 GHz band (3.55-3.7 GHz) and will be auctioning 70 megahertz of Priority Access Licenses in the band this summer. Our C-Band Order will make available 280 megahertz for 5G (3.7-3.98 GHz).

We are currently in the middle of a Tribal priority access window to 2.5 GHz spectrum and then will auction the rest of the unused spectrum in the band. And we are continuing to work on making available additional spectrum in the 3.1-3.55 GHz band, and the 4.9 GHz band, among others.

Outside of licensed spectrum, the Commission continues to open up new unlicensed opportunities. We made available over 20 gigahertz of new unlicensed spectrum available above 95 GHz in the *Spectrum Horizons* proceeding, and we just opened another 1,200 megahertz for unlicensed use in the 6 GHz band. We also have proposed to reform the 5.9 GHz band to make an additional 45 megahertz available for unlicensed operations.

All of these efforts position the United States to be the world leader in wireless innovation of all kinds. This spectrum, and the innovation it enables, will be needed for a wide variety of purposes: mobile broadband, Internet of Things applications, virtual and augmented reality, and other things we can't even conceive today. And I anticipate that its use will span virtually every industry, including transportation, health care, education, manufacturing, gaming, and much more.

3. I have worked with the commission on various new initiatives and look forward to continue to grow the toolbox of solutions for our state. One new technology that is interesting is Low Earth Orbiting satellites (LEOs). While still new and not fully tested, they present an opportunity to reach our most remote areas with much faster speeds then traditional satellite broadband. It is my understanding that the commission is including LEOs in the Rural Digital Opportunity Fund (RDOF).

    a. How do you see LEOs addition impacting RDOF's funding and broadband deployment in rural areas?

    b. Does the commission have pending license approvals for LEOs, what is the process for approvals, and how long until pending licenses are approved?

RESPONSE: The Commission adopted a technology-neutral approach to the $20.4 billion Rural Digital Opportunity Fund so that a diverse array of interested parties can participate. This includes any satellite company that can meet the required specifications. The Commission's decision requires participating entities to be able to provide voice and broadband services at a minimum speed of 25/3 Mbps, with a priority given to bidders that commit to provide faster service with lower latency. The Commission has sought comment on how to evaluate pre-auction applications from nascent technologies, such as low-earth orbiting satellite constellations, to participate in the auction. Staff is currently reviewing comments received on this issue.

Regarding licensing, the Commission has accepted applications for these non-geostationary orbit (NGSO) constellations, including low-Earth orbiting constellations. The Commission has granted 14 such applications filed by 10 companies seeking to deploy NGSO constellations, both for the provision of broadband and other services (*e.g.* Internet of Things). In addition, SpaceX has already launched more than 300 satellites of its authorized constellations. Commission staff continues to work on the remaining pending applications.

4. I have heard concerns from Montana's veterans and adults who are hard of hearing about the Commission's addition of Automated Speech Recognition in the IP CTS Program. Every day new technology is created to address more solutions which boost our economy and raises our standard of living. However, it is important that as the FCC looks to add new services for the hard of hearing that we do not see a reduction in overall customer satisfaction. Last year I asked you to continue to work with affected groups in order to make sure their concerns are addressed and I appreciate the commission staff meeting with a number of parties recently.

    a. Can you update me on how the commission is ensuring that accessibility, reliability, cost, choice and competition, is not negatively affected?

    b. Can you update me on the quality and performance measures adopted?

    c. Can you update me on how ASR-only IP CTS will be integrated into the 911 call system and if you expect any issues?

    RESPONSE: IP CTS is a critical service for people with hearing loss, and I agree that consumers must receive quality service that is reliable. Notably, most IP CTS providers have relied on ASR for years to provide service to users. However, those providers insert a communications assistant—a person—between the caller and the ASR, requiring the communications assistant to revoice whatever the caller is saying. This substantially slows down transcription and reduces the privacy of users.

    That's why the Commission has found that ASR-only service is a viable alternative—it offers improvement in speed, accuracy, reliability, and privacy for consumers because you don't need a communications assistant to participate on the call. Additionally, the Commission found that allowing ASR-only service for IP CTS could provide greater security for the Telecommunications Relay Service Fund and reduce the current cost burden on Fund contributors. Like other IP CTS providers, ASR-only providers are required to comply with functional standards, including submission of data to determine Fund revenue requirements and payments, and comply with rules to safeguard the Fund from fraud, waste, and abuse.

    ASR-only service is subject to the Commission's minimum standards for all forms of TRS, such as being required to handle all types of calls, to ensure confidentiality, and to transmit calls verbatim in real time, without intentional alteration to content. Additionally, providers must meet the Commission's applicable technical standards, including speed-of-answer and redundancy requirements. Importantly, as with all forms of IP CTS, providers using ASR must demonstrate that their services support 911 emergency calls and meet the applicable emergency call handling requirements in Commission rules. Finally, ASR providers must report data to the Commission to help us determine if further measures are necessary.

    Consumers continue to be able to choose between multiple providers based on the quality of service and the methods the provider offers, including services that use communications assistants. While most IP CTS providers use ASR as part of their service, four entities have filed applications to provide ASR-only service. Those applications remain under review by Commission staff.

(Minority Questions)

Questions from Senator Leahy (VT)

1. In 2019, the FCC canceled the Mobility Fund Phase II after it was found that the maps submitted by wireless carriers were widely inaccurate. For example, the Vermont Public Service Department had an employee drive every highway in the state to test the signals from the major carriers. The State then submitted the data from that drive test as part of the Commission's challenge process showing wide swaths of the State did not have coverage the carriers claimed. Rather than devise a new program to assist states lacking in 4G service the Commission has pushed forward with a new plan called 5G for Rural America.

    a. Shouldn't the Commission be focusing resources towards those states that lack 4G connectivity rather than redirecting funds that will serve to further the digital divide? What steps will the Commission be taking to help those areas of the country that were expecting assistance from the Mobility Fund Phase II? Can the Commission explain how the 5G Fund for Rural America will help those areas waiting for 4G connectivity?

    RESPONSE: We're at the dawn of the 5G era. 5G promises significantly faster speeds, lower latency, and better security than 4G LTE networks. It doesn't make sense to spend our universal service funds to deliver networks using predecessor technologies that will be outdated by the time they're operational and condemn rural wireless consumers to a continual game of catch-up with their urban counterparts. They deserve parity, and they deserve it now, not decades from now. At the same time, I agree that some areas have a greater need for support, which is why the Commission proposed in the 5G Fund Notice of Proposed Rulemaking adopted at our April agenda meeting to prioritize and provide greater support for areas that have historically lacked 4G LTE and 3G coverage.

2. Amid the COVID-19 outbreak, schools across the country are shuttering for weeks – maybe months – at a time. Many schools are turning to online education services. This is helpful to continue education, but proves problematic in regions where internet connectivity is challenging at best, and sometimes even impossible.

    a. What steps will the FCC be taking to connect with states about challenges their school districts face in providing quality, online education to students out of school?

    b. Will you commit to evaluating those needs, reporting back to this Committee about the needs identified, and propose to this Committee policies and proposals that will address these gaps in coverage, so that we can ensure a level playing field – online – for students out of school due to this public health crisis?

    RESPONSE: Since March, I have been working with Congress to appropriate dedicated funding for a remote learning initiative—one that will give students across this country an opportunity to connect with their teachers and online educational resources. Fortunately, the recently enacted Coronavirus Aid, Relief, and Economic Security Act (CARES) Act's Education Stabilization Fund provides one avenue for just such funding. In the CARES Act, the Elementary and Secondary School Emergency Relief Fund

provides more than $13 billion in grants that elementary and secondary schools can use for purposes that include remote learning. In addition, the Governor's Emergency Education Relief Fund makes approximately $3 billion in emergency block grants available to governors to decide how to best meet the needs of students. Together, these Funds make $16 billion available to governors and schools, states, and localities to connect students to remote learning resources. The FCC is coordinating with the U.S. Department of Education on this effort, and I look forward to working with Secretary DeVos, Congress, and states to ensure these funds are properly spent to keep our students connected.

Complementing this effort, we have also taken steps to help those schools that participate in the Commission's E-Rate program transition to online learning by waiving and extending several program rules and deadlines. One such waiver of the Commission's gift rule enables service providers to offer, and program participants to solicit and accept, free broadband connections, devices, and other services that support remote learning, which would otherwise be prohibited under our rules. Similarly, we have extended a number of E-Rate program deadlines to alleviate administrative and compliance burdens on schools and enable them to focus on transitioning to remote learning. This relief includes a 35-day extension of the application filing window for funding year 2020 and, more recently, a one-year extension of the so-called service implementation deadline for special construction to deploy fiber. Additionally, to facilitate community connectivity during the coronavirus pandemic, we clarified how schools and libraries may permit the general public to use E-Rate-supported Wi-Fi networks.

Questions from Senator Durbin (IL)

1. It's clear that there is bipartisan support for doing all we can to close the Digital Divide and ensure that every child, adult, and small business has the opportunity to access quality broadband speeds. Recently, the Commission launched the $20.4 billion Rural Digital Opportunity Fund (RDOF) to help improve and expand broadband access. I'm very concerned by the Federal Communications Commission's (FCC) last minute decision to effectively leave out areas where states have invested in their own broadband infrastructure.

    a. Why would the FCC create a disincentive for states to invest in their own broadband infrastructure?

    RESPONSE: The Commission has long supported other state and federal efforts to close the digital divide. Indeed, the very first item I circulated as Chairman was an order to partner with the state of New York to facilitate their state efforts to get more Americans connected. But the question we faced with the Rural Digital Opportunity Fund was a different one, and the basic principle we followed is simple: If a service provider already has been given funding (federal and/or state) to serve a particular area with at least 25/3 Mbps broadband, the FCC is not going to give them yet more taxpayer funding to do something they're already obligated (by federal and/or state law) to do. That would be an irresponsible use of limited taxpayer dollars and would bestow a windfall on corporations that should not be paid for the same work twice at the expense of some areas that would otherwise not receive service.

2. It is important that we view broadband expansion as a long-term investment and ensure that the fiber underlying our broadband networks can last for 20 to 30 years, or more.

    a. How does the RDOF program ensure that we are making investments that will stand the test of time and will not require new infrastructure investment in the coming years?

    RESPONSE: It is imperative that the Universal Service Fund support sustainable, future-proofed networks that will support tomorrow's broadband applications, as well as today's. That's why, in January, we established final rules for the $20.4 billion Rural Digital Opportunity Fund that will have a significant impact in promoting the deployment of sustainable networks. The Commission will use a two-phase reverse auction that will provide support for up to gigabit service to millions of unserved Americans who currently lack access to fixed 25/3 Mbps broadband. The rules we adopted made three key departures from the previous CAF Phase II auction so that the Rural Digital Opportunity Fund supports networks that will stand the test of time. First, we more than doubled the minimum speeds that bidders must commit to provide. Second, we modified the weights that apply to bids to favor faster, lower latency networks. And third, as soon as the total price of all bids in the auction falls below the auction's budget, support will be awarded to the remaining bidder with the highest-performing network in each area. In other words, the auction will support the best, longest-lasting network possible in each area given the available budget.

Financial Services and General Government Subcommittee

Federal Communications Commission

Questions for the Record Submitted by Chairman Quigley

PRESIDENTIAL INDEPENDENCE

Chairman Pai, you harshly criticized your predecessor, Tom Wheeler, for his apparent lack of independence from the President.

In 2015, in your dissent to the Open Internet Order, you wrote: "This isn't how the FCC should operate. We should be an independent agency making decisions in a transparent manner based on the law and the facts in the record. We shouldn't be a rubber stamp for political decisions made by the White House."

This was in response to a public video released by the White House calling for the FCC to adopt strong net neutrality rules under Title II of the Communications Act.

However, under your chairmanship, the FCC appears to have a much closer relationship to the White House than previous Commissions. For example, you first announced your Rural Digital Opportunity Fund and 5G FAST Plan at a White House 5G event, where you were introduced by and spoke right after President Trump. According to numerous news reports, you announced a public C-band auction only after receiving a phone call from the President on Oct. 30. In February, you traveled with the President to India.

- How do these repeated and significant interactions with the President comport with the transparency and independence from the White House you are on record as saying are essential to proper functioning of the FCC?
- Will you provide a list to us of all times you or your senior staff spoke with the President or other senior White House officials, and the participants and topics of those conversations?
- Why didn't you enter a summary of your phone call with President Trump about the C-band into the official rulemaking record?
- Who was responsible for determining whether that phone call needed to be noted in the official record?
- Are you saying, on the record, that White House officials never expressed a single opinion, suggestions, or recommendation related to actives issues under the FCC's jurisdiction, to either you or your staff, during the planning for or conduct of any of the three interactions noted above?
- Doesn't this close coordination with the White House give the appearance of improper influence? Why isn't that a problem?

RESPONSE: I agree with you that the Federal Communications Commission must be independent from political interference. As Chairman, I have made transparency a top priority in part to ensure the agency's independence and open-door decision-making. Indeed, shortly after being named Chairman, I announced that, for the first time, the Commission would provide the public with the full text of drafts provided to Commissioners three weeks in advance of

Commission meetings. Previously, these documents were not made available to the public until after a final vote had already taken place.

Making rulemaking documents publicly available in this manner not only increases transparency, but also fosters additional public participation in the rulemaking process. For example, during the C-band rulemaking proceedings, the Commission received scores of comments and met with a wide-array of stakeholders following the public posting of the relevant material in advance of the Commission's vote. The comments the Commission received, and a summary of these meetings, were all considered by the Commission in our final rulemaking and are publicly available consistent with the Commission's *ex parte* rules.

Given the central role the Commission plays in federal communications policy, it is both appropriate and reasonable for the Commission to work collaboratively and exchange ideas with other federal partners, including the White House and Congress, to facilitate the development of sound, well-researched policies. In accordance with the Commission's *ex parte* rules, and subject to limited exceptions, any communication made by any agency or branch of the federal government, including communication initiated by the White House or Congress, that is of substantial significance and clearly intended to address the merits or outcome or to influence the timing of a Commission proceeding is summarized in the proceeding's record and is publicly available.

As has been publicly reported, the purpose of President Trump's October 30, 2019, phone call was not to influence the outcome of the Commission's proceedings in any way but instead to gain an understanding of the issues involved in the C-band proceeding. The Commission routinely fields calls like this from other federal agencies, the White House, and from Members of Congress seeking information about pending Commission rulemakings. The Commission's *ex parte* rules require that these communications be placed in the record only where they are of substantial significance and are clearly intended to address the merits or outcome of a Commission proceeding. There is no disclosure requirement unique to communications with the White House. Since the President's communication was not intended to influence the outcome of the proceeding in any way, consistent with our *ex parte* rules, there was no need to enter it into the record.

Where there is a close or difficult question about the Commission's *ex parte* rules, such a question would be typically be referred to the Office of General Counsel. A phone call seeking information about a Commission rulemaking—rather than attempting to influence the outcome of such a rulemaking—does not involve a close or difficult legal question. Instead, the Commission's *ex parte* rules plainly do not require such communications to be placed in the administrative record. Accordingly, my office did not seek the advice of the Office of General Counsel in this instance (and I have familiarity with those rules in any case, having served in the Office of General Counsel for several years, including as Deputy General Counsel overseeing the Administrative Law Division team responsible for administration of the *ex parte* rules).

Finally, I disagree that updating the White House, other federal agencies, or Congress on the status of ongoing proceedings suggests any undue influence. It's quite often a necessity. It would be absurd, for example, for the FCC to develop its policies on communications supply chain integrity without consulting Executive Branch agencies with responsibilities for supply chain issues. It would be impossible for the FCC to fashion spectrum policies in bands involving federal incumbents without working with said incumbents. It would be bizarre for the FCC to

freelance on 5G security policies with foreign governments (which was, I would add, the primary reason for my trip to India) without coordinating with those responsible for foreign policy—namely, the White House and Department of State. And it is telling that at the 5G event you referenced, you correctly noted that I "announced" my plan for the Rural Digital Opportunity Fund and the largest spectrum auction in American history. The FCC under my leadership developed those initiatives, and I then announced them at the White House. The White House didn't develop those initiatives and then issue a directive that I endorse it. That has never once happened.

But of course, that's not the way it's always been. Explaining what the Commission is doing to a political actor is a far cry from a political actor telling the Commission what to do, which is what happened several times during the Obama Administration. The most noteworthy case of this, of course, was the undue influence that led to the *Title II Order*. There, the White House explicitly directed the FCC to scrap the non-Title II plan it previously proposed for a very different one developed by the White House in secret. That the direction was in a public YouTube video makes no difference; the compromise of the agency's independence came from the fact that the Commission was heading east and then made a screeching U-turn when the White House told it to head west. Indeed, Commission staff for months had been drafting an Open Internet Order that would have adopted net neutrality rules without declaring the Internet a public utility but, just weeks before circulation, White House intervention required the FCC to switch course and instead issue the *Title II Order*. The plan in that order was formulated entirely outside a transparent notice-and-rulemaking process. Instead, it was developed through "an unusual, secretive effort inside the White House," according to *The Wall Street Journal*. Indeed, White House officials, according to the *Journal*, functioned as a "parallel version of the FCC." Their work led to the President's announcement in November of his plan for Internet regulation, a plan which "blindsided" the FCC and "swept aside . . . months of work by [Chairman] Wheeler toward a compromise."

But the debacle of the *Title II Order* wasn't the only instance in those years. There was also the April 2016 White House directive "calling on the FCC to open up set-top cable boxes to competition"—an out-of-the-blue intervention against which the agency yet again buckled by proposing set-top box regulations in September of that year (it ultimately didn't pass). There may have been other cases, but if so, they haven't been publicly disclosed.

Unlike the way it worked in those situations—the White House instructed, and the FCC dutifully complied—the Commission under my leadership has ensured that its policies and rulemakings are developed independently and in an open and transparent process, relying heavily on the expertise of our career staff, while also encouraging the input and participation of the public and other parties in the rulemaking process. That our decisions only *thereafter* find favor—or not—with the White House is the perhaps best evidence that we are once again an independent agency.

But don't just take my word for it. Take the President's. At a White House event on November 15, 2018 celebrating the Indian festival of Diwali, the President invited me to say a few words about the importance of the holiday to Indian-Americans. As he did so, he stated "I just didn't like one decision [Chairman Pai] made, but that's all right . . . he's independent." I'd say he's right.

CONSUMER PROTECTION

When the FCC reversed the strong net neutrality rules put into place by the Open Internet Order, a key argument was that the Federal Trade Commission (FTC) would still be able to protect broadband customers using its consumer protection and antitrust authorities. To facilitate this, the FCC signed a memorandum of understanding with the FTC to share relevant information.

This subcommittee also oversees the FTC. In researching this issue, my staff and I have confirmed that as of February the FCC has not proactively referred a single consumer complaint to the FTC about broadband service since the net neutrality repeal went into effect. While the FCC has forwarded roughly 4,000 complaints to the FTC, every single one was provided at the request of the FTC.

- Why hasn't the FCC affirmatively forwarded, on its own recognizance, any complaints related to broadband service to the FTC?
- Is it your position that no consumer has raised a concern noteworthy enough to send to the FTC for potential investigation?
- Given that the FCC continues to oversee billions in annual subsidies for broadband, we find it reasonable that consumers first turn to the FCC when they have concerns about broadband service. What do you consider the FCC's role to be in ensuring that those complaints are not overlooked due to jurisdictional issues?
- The FCC has been developing expertise on broadband issues for decades. Wouldn't consumers would be better protected if the FCC leverages its expertise in proactively analyzing consumer complaints and making affirmative recommendations to the FTC?
- Do you believe that the FCC's action to date on broadband service fully satisfy the terms of the memorandum of understanding?

RESPONSE: Since the establishment of the 2018 Memorandum of Understanding with the FTC, the Commission has securely shared approximately 7,000 Internet-related complaints with the FTC, and approximately 2,000 such complaints have been shared proactively by the FCC. But given our experience with the complaint-sharing process, staff generally refers complaints at the request of the FTC that pertain to issues within the authority of the FTC. The Commission does monitor for trends and patterns within the complaints that we receive that may warrant investigation by either the FCC or the FTC. In addition, FCC staff continues to participate in the regular coordination meetings with FTC staff established by the Agencies' 2015 Memorandum of Understanding.

Importantly, only a fraction of Internet-related complaints we receive have anything to do with net neutrality. The vast majority of the Internet-related complaints that the FCC receives involve consumer-specific, pocketbook issues like billing, service quality, speed, and general availability. Under our informal complaint process, these complaints are served by the Commission on the provider and a response is provided to the consumer typically within a 30-day period. We serve over 20,000 Internet-related complaints per year, and providers offer a timely and individualized response to approximately 95% of the complaints served. This process is free to consumers and provides real relief for a majority of complainants. In our experience, this informal process is more effective to address these issues than referring complaints for potential enforcement because it provides individual relief to consumer complaints and inquiries.

Finally, we continue to be active in fulfilling the terms of the 2018 Memorandum of Understanding. As anticipated, the Commission has taken enforcement action as appropriate with respect to failures by ISPs to comply with the *Restoring Internet Freedom Order* requirements to file with the FCC or display on a publicly available website the specified subjects of disclosure. FCC staff has also conducted several training sessions with FTC staff to share relevant technical and legal expertise concerning broadband Internet services.

CYBERSECURITY AND NATIONAL SECURITY

The FCC has voted to ban the use of the Universal Service Fund (USF) money to buy equipment from ZTE or Huawei due to national security concerns. The Commission is now collecting information about the scope of a potential "rip and replace" program, which would aid implementation of the Secure and Trusted Communications Networks Act of 2019 (P.L 116–124).

- A network is only as secure as its weakest link. While I'm encouraged by the actions taken to address national security risks around USF recipients, your policy does not address broadband networks that do not receive Federal subsidies. What actions is the FCC taking to address vulnerabilities across other parts of the network?

RESPONSE: In an increasingly connected world, safeguarding the security and integrity of America's communications infrastructure has never been more important. The Commission has taken and continues to take a number of steps to protect the nation's communications networks from potential security threats. As you note, in November 2019, the Commission barred the use of Universal Service Fund (USF) support to purchase equipment and services from companies that pose a national security threat and initially designated Huawei Technologies Company and ZTE Corp. as companies covered by this rule. The Commission also proposed to require carriers receiving USF funds, known as eligible telecommunications carriers, to remove and replace existing equipment and services from covered companies. Currently, the FCC is determining whether to finalize the initial designations of Huawei and ZTE, and we are collecting data about where equipment from these two companies is deployed as well as the costs associated with removing and replacing it.

In addition to these efforts, the FCC is working to implement the Secure and Trusted Communications Networks Act of 2019 (Secure Networks Act), which was signed into law on March 12, 2020. By banning the use of FCC subsidies for the purchase of covered equipment and establishing a reimbursement program for its removal and replacement, this new statute ratifies the approach unanimously taken by the Commission in November 2019. Moreover, Section 4 of the Secure Networks Act provides the Commission with authority to reimburse certain providers of advanced communications services for removing and replacing covered equipment regardless of whether they are current USF recipients. The FCC's Wireline Competition Bureau recently sought comment on the applicability of Section 4 to the proposals in our November 2019 Further Notice of Proposed Rulemaking, and we look forward to reviewing the record as it develops. Furthermore, Section 5 of the Secure Networks Act requires all providers of advanced communications service, regardless of whether they are USF recipients, to report to the Commission on the extent to which they have covered equipment or services in their networks. These statutory provisions will help incentivize carriers that are not USF recipients to address vulnerabilities in their networks.

The FCC's actions along with enactment of the Secure Networks Act position us to move forward to protect the American people. However, it is critical that Congress quickly appropriate the necessary funding to reimburse carriers for replacing equipment or services found to be a national security threat. Consistent with the estimates developed by the FCC's Office of Economics and Analytics in our November 2019 Further Notice of Proposed Rulemaking, I believe that $2 billion of funding would be appropriate for this purpose. This funding is essential to successfully transition the nation's communications networks—especially those of small and rural carriers—to infrastructure provided by more trusted vendors.

- In the past, you have argued that the FCC has limited jurisdiction related to cybersecurity. Considering your recent actions, do you still believe that the FCC has limited jurisdiction over the cybersecurity practices of regulated firms?
- Commissioner Rosenworcel has suggested that there are additional steps the FCC can take to promote cybersecurity, including use of its equipment authorization process to encourage device manufacturers to integrate more security features. Why hasn't the FCC acted on that proposal?
- Former Chairman Wheeler attempted to improve security for 5G wireless devices through cybersecurity reporting requirements, but the November 2017 Spectrum Frontiers item rescinded this previously adopted rule. Why did you eliminate the requirements, and how does that elimination promote 5G security?

RESPONSE: The Department of Homeland Security (DHS) has the lead role for overseeing the cybersecurity of our nation's communications networks, and the FCC plays a supporting role in that effort. In particular, the FCC lends its technical expertise to DHS and other federal and state agencies, and actively participates in the sharing of network status information, to help secure communications networks. And I personally have worked closely with the Director of DHS's Cybersecurity and Infrastructure Security Agency on a variety of cybersecurity-related issues.

Although DHS plays the lead role, the Commission has taken and continues to take a number of steps to protect the nation's communications networks from potential security threats. For example, the Commission recently adopted a rule restricting the use of funding from the Commission's Universal Service Fund on equipment or services from a company posing a national-security threat to the integrity of U.S. communications networks or the communications supply chain. This pivotal decision was grounded in express grants of authority under the Communications Act of 1934, as amended, including the Commission's well-established authority to ensure that such funds are spent in a manner consistent with section 254 of the Communications Act and to place reasonable public interest conditions on the use of these federal funds.

The Commission also took action to deny China Mobile USA's application to provide telecommunications services between the United States and foreign destinations. This action followed close consultation with Executive Branch agencies having expertise in national security and law enforcement. Building upon its rejection of China Mobile USA's application, the Commission also issued Orders to Show Cause against four companies that are ultimately subject to the ownership and control of the Chinese government: China Telecom Americas, China Unicom Americas, Pacific Networks, and ComNet. Specifically, consistent with legal

requirements, we have asked those companies to tell us why we shouldn't initiate proceedings to revoke their authorizations to provide service in the United States.

Last May, more than 140 representatives from 32 countries came together to develop the Prague Proposals, a consensus approach for protecting next-generation networks—and I attended as a representative of the FCC and the United States Government. As acknowledged in the Proposals, there are "no universal solutions" to security, as "the most optimal path forward when setting the proper measures to increase security should reflect unique social and legal frameworks, economy, privacy, technological self-sufficiency and other relevant factors important for each nation."

The Commission also leverages the Communications Security, Reliability, and Interoperability Council (CSRIC), a Federal Advisory Committee to promote the security, reliability, and resiliency of the Nation's communications systems. In 2018, CSRIC VI adopted recommendations on Network Reliability and Security Risk Reduction, addressing several security concerns associated with the deployment of 5G networks, including risks introduced through the supply chain and best practices available to enterprises to manage their supply-chain risks. CSRIC VI recommended that the Commission consider the ongoing work within DHS to identify critical infrastructure risk factors and within the National Institute of Standards and Technology to update supply chain best practices included in NIST's Cyber Security Framework, before taking further action. The Commission's Public Safety and Homeland Bureau recently sought comment on the implementation and effectiveness of CSRIC's 2018 recommendations regarding certain security measures to mitigate network reliability and security risks associated with the Diameter protocol, including any progress, barriers, and lessons learned.

The most recent charter of CSRIC, CSRIC VII, is considering standard operating procedures for the security of 5G and 911 networks and the security of the Session Initiation Protocol used to initiate, maintain and terminate voice, video and messaging applications. The Commission makes CSRIC best practices, including past recommended practices related to wireless security, available to the public.

In addition to its efforts through CSRIC, the Commission recently adopted improvements to its submarine cable outage reporting requirements to focus reporting on significant disruptions including events with national security implications.

Turning to the question of the Commission's equipment authorization process as a tool to promote security, it helps to start with the purpose of this program. The purpose of the Commission's equipment authorization program is to ensure that radiofrequency devices do not cause harmful interference within and between radio services. As part of this process, device compliance, among other things, takes into consideration the FCC's service-specific rules applicable to the intended use of the device. In such instances, manufacturers must certify compliance with whatever security features are specified in the applicable service rules to prevent users from modifying the radiofrequency parameters of devices in a manner that would affect compliance with the Commission's rules and, thus, risk causing harmful interference. Given that the equipment authorization process already takes into consideration security depending on the requirements specified in service rules, we do not believe it is necessary to change our current equipment authorization program.

The Commission's approach to addressing security requirements within our services rules reflects our recognition that a one-size-fits-all approach would likely reduce licensee flexibility

to adapt to rapidly changing threat vectors and potentially inhibit innovation—especially in the nascent deployment of 5G and development of 5G architecture. That is why, in part, the Commission rescinded the previously adopted cybersecurity reporting requirements and instead sought input from the CSRIC in the *2017 Spectrum Frontiers Order on Reconsideration.* The Commission determined that imposing a regulatory approach to 5G, without more input from industry, was premature. Accordingly, as noted above, we tasked CSRIC VI to develop best practices to mitigate cyber risks and to inform the Commission of any additional steps that may be necessary to secure our networks. Today, we continue our work with DHS to identify critical infrastructure risk and supply chain risk factors, consistent with many of the recommendations identified by CSRIC VII, and we continue to work with NIST to update supply chain best practices before taking further action.

- Is the FCC taking any actions to educate the public about wireless security issues?

RESPONSE: Yes. For example, the Public Safety and Homeland Security Bureau, the Office of Communications Business Opportunities, and the Wireline Competition Bureau hosted a joint webinar in June 2019 for small and rural providers on available resources and best practices regarding network reliability and security. This included a discussion of the Small Business Cybersecurity Planner 2.0 (https://www.fcc.gov/cyberplanner), an online resource to help small businesses create customized cybersecurity plans, as well as other publicly available resources. The FCC also offers several resources and tools to educate the public about securing wireless handsets, including the Wireless Connections and Bluetooth Security Tips Consumer Guide (https://www.fcc.gov/consumers/guides/how-protect-yourself-online), the FCC Smartphone Security Checker (https://www.fcc.gov/smartphone-security), Ten Steps to Smartphone Security (https://www.fcc.gov/sites/default/files/smartphone_master_document.pdf), and Mobile Wallet Services Protection (https://www.fcc.gov/consumers/guides/mobile-wallet-services-protection).

ROBOCALLS

In 2019, Americans received more than 50 billion robocalls. They are the number one consumer complaint at the FCC, and a primary source of concerns by constituents in my district and many others.

- The TRACED Act (P.L. 116–105) went into effect in December. It requires the FCC to take numerous actions to help combat robocalls. What progress have you made so far on implementing the TRACED Act?

RESPONSE: We are on track with implementation of the provisions in the TRACED Act, which gives the Commission new tools and authority to crack down on these problematic calls. For example, we have established a process to select a private-led consortium to trace back the origin of suspected unlawful robocalls. We have launched the Hospital Robocall Protection Group and are seeking nominations as soon as possible in order to get this important Advisory Committee to work. And at the March Open Meeting, the Commission mandated that voice service providers implement caller ID authentication using the STIR/SHAKEN framework. This technology enables phone companies to verify the caller ID information that is transmitted with a call and will help them identify calls with illegally spoofed caller ID information before those calls reach Americans' phones. These actions are on top of the multi-pronged approach used by

the Commission to tackle robocalls head-on—such as allowing telephone providers to block by default suspected malicious and illegal calls, applying anti-spoofing prohibitions to international robocalls, and taking aggressive enforcement actions against robocall violators.

- My understanding is that the FCC has limited staff dedicated to robocall enforcement and that robocall investigations on average take nearly two years to complete. Why haven't you increased the number of staff dedicated to investigating robocall issues?
- What steps could the FCC take to increase the speed and efficacy of its robocall investigations?
- The coronavirus epidemic has led to a serious uptick in robocalls peddling misinformation, selling products of dubious efficacy, or promoting other types of fraudulent activity. What actions has the FCC taken specifically to address these types of robocalls?

RESPONSE: The Commission's Enforcement Bureau has a division dedicated to combatting unwanted robocalls. It is called the Telecommunications Consumers Division, which has consolidated resources to handle the enforcement of violations involving the TCPA, Truth in Caller ID, Do Not Call Registry, and related statutes and regulations. Most staff and resources in the Telecommunications Consumers Division is already focused either primarily or exclusively on robocall matters, and additional staff throughout the agency (i.e., those not working on enforcement but policymaking regarding robocalls) are brought in as necessary to assist with those enforcement actions. We have issued numerous Forfeiture Orders or Notices of Apparent Liability over the last three years and will continue our efforts using the new tools provided in the TRACED Act. And earlier this month, because the TRACED Act finally removed the legal requirement that the Commission warn robocallers before taking action against them, the agency was finally able to end the practice of issuing citations to most robocallers before issuing penalties for violating the law and for harassing consumers with unwanted robocalls.

Enforcement Bureau staff also works closely with industry and our Federal partners on traceback efforts to stop the illegal calls at the source. Most recently, in March, the Commission partnered with the Federal Trade Commission, the U.S. Department of Justice, and USTelecom's Industry Traceback Group to tackle the threat of COVID-19 robocall scams. At the beginning of April, the FCC's Enforcement Bureau and the FTC's Bureau of Consumer Protection issued demand letters to three gateway providers that were facilitating the COVID-19 robocall scams originating overseas. The letters warned these gateway providers that they had to cut off these calls or face serious consequences. Specifically, unless these gateway providers stopped bringing these calls into the United States in the next 48 hours, other phone companies would be able to begin blocking *all* traffic from these gateway providers' networks. The FCC and FTC worked closely with the U.S. Department of Justice on this first-of-its-kind effort to stop scammers from reaching American consumers, and I am pleased to report that all three of these gateway providers informed us within 24 hours of receipt of the demand letters that they cut off these scam calls.

We previously engaged with gateway providers towards our goal of ending illegal robocalls. The Enforcement Bureau sent letters in February to seven companies that allow international robocalls into U.S. networks, seeking their support to trace back the originators of the illegal spoofed foreign robocalls. These companies are uniquely situated to assist both government and

industry efforts. In addition to asking them to take measures to prevent the flow of illegal traffic into the U.S., the Enforcement Bureau also asked for specific information from these companies about their facilitation of international robocalls. In response, providers indicated that they used call analytics and "know-your-customer" practices to detect and mitigate illegal calls and that they were in the process of implementing STIR/SHAKEN. The Enforcement Bureau has been monitoring and will continue to monitor these companies for their cooperation with public and private efforts to identify the source of illegal foreign robocalls. It stands ready to take swift and decisive actions to stop unwanted and unlawful traffic. And we will remain close partners with the DOJ and the FTC.

Finally, almost immediately upon learning about these new robocall scams related to the coronavirus pandemic, our Consumer and Governmental Affairs Bureau created and launched the "COVID-19 Consumer Warnings and Safety Tips" webpage and released a Consumer Alert to increase awareness. Our webpage, www.fcc.gov/covid-scams, is being updated as new scams emerge, and we hope that consumers will continue to use it to protect themselves from these illegal calls.

BROADBAND FUNDING AND BROADBAND MAPS

As your recent hearings with this subcommittee, and its counterpart on the Senate, have demonstrated, there is significant and ongoing concern about the FCC's proposal to proceed with the Rural Digital Opportunity Fund before new broadband availability maps are ready. The existing maps are highly problematic, broadly overstating the true availability of broadband maps.

- Under the RDOF plan, you propose allocating up to $16 billion to areas that are currently completed unserved and $4 billion on other areas. How did you arrive at that split?
- Is $4 billion enough to cover the remaining unserved locations in the U.S.?
- Does your plan future-proof broadband access, so we don't have to provide funding to these areas again and again?
- The FCC's RDOF order penalizes states that make their own investments in broadband to unserved areas. Why did you adopt this policy and why do you think that it is a reasonable approach?

RESPONSE: It is imperative that the Universal Service Fund support sustainable, future-proofed networks that will support tomorrow's broadband applications, as well as today's. That's why, in January, we established final rules for the $20.4 billion Rural Digital Opportunity Fund that will have a significant impact on broadband deployment in unserved areas. The Commission will use a two-phase reverse auction that will provide support for up to gigabit service to millions of unserved Americans who currently lack access to fixed 25/3 Mbps broadband. Phase I will target up to $16 billion in support over ten years to wholly unserved census blocks—those areas where no one disputes that there is no service at all—in order to make sure that the areas most in need will get broadband service quickly. Commission staff estimate that more than 11.7 million Americans live in areas that could receive broadband through the Phase I auction, including approximately 420,000 in Illinois alone. Those are 11.7 million Americans who are missing out on digital opportunity and the economic, educational,

healthcare, civic, and social benefits it brings. The current pandemic has highlighted the impact of the digital divide more starkly than ever, and that is why I believe it is unjust to tell those 11.7 million Americans who we *know* are unserved to wait for digital opportunity while we try to locate every single American that lacks broadband. Then, Phase II will make available at least $4.4 billion to fill in the remaining coverage gaps by supporting networks that will serve partially unserved census blocks, along with areas not won in Phase I.

The Commission adopted $16 billion for Phase I given the likely eligible areas and what we expect it may cost to deploy those areas, balancing our objectives of encouraging robust competition and closing the digital divide. The Commission recognized the need for flexibility, which is why we specifically contemplated revisiting the Phase II budget after the Phase I auction and completion of the Phase II data collection, when we know precisely the areas and unserved locations eligible for Phase II. But that does not diminish our obligation to ensure that the millions of Americans who we *know* lack access to broadband are connected to digital opportunity as soon as possible.

The rules we adopted made three key departures from the previous CAF Phase II auction in order to ensure that the Rural Digital Opportunity Fund supports networks that will stand the test of time. First, we more than doubled the minimum speeds that bidders must commit to provide. Second, we modified the weights that apply to bids to favor faster, lower latency networks. And third, as soon as the total price of all bids in the auction falls below the auction's budget, support will be awarded to the lowest bidder with the highest-performing network in each area. In other words, the auction will support the best, longest-lasting network possible in each area given the available budget.

Finally, the Commission has long supported other state and federal efforts to close the digital divide, and our staff continue to engage with states whenever possible to coordinate federal and state broadband deployment funding. Indeed, the very first item I circulated as Chairman was an order to partner with the state of New York to facilitate their state efforts to get more Americans connected. But the question we faced with the Rural Digital Opportunity Fund was a different one, and the basic principle we followed is simple: If a service provider already has been given funding (federal and/or state) to serve a specific area with 25/3 Mbps broadband, the FCC is not going to give them yet more taxpayer funding to do something they're already obligated (by federal and/or state law) to do. That would be an irresponsible use of limited taxpayer dollars and would bestow a windfall on corporations that should not be paid for the same work twice, particularly not at the expense of funding being directed to areas where broadband will not be deployed without support.

C-BAND AUCTION

We are encouraged to see the FCC commit to a public C-band auction. However, as part of its plan, the FCC has proposed providing incumbent satellite providers in this band up to $10 billion in "incentive payments" to transition out of the spectrum faster. We are concerned that the agency is pursuing a problematic auction design that could unnecessarily drain agency resources and divert revenues away from the Treasury.

- Has the FCC ever structured an auction like this before? Why do you think the FCC currently has the legal authority to provide these incentive payments?

- There is little greenfield spectrum left, so future spectrum auctions are likely to also present complex issues involving incumbent users. Do you have any concerns that providing such large incentive payments would create problematic precedents for future spectrum policy?
- According to your analysis, if certain key assumptions hold, then the $10 billion in incentive payments will be a net generator of revenue, because companies would be willing to pay more than that to get access to the spectrum faster. What happens if those assumptions are incorrect? In particular, what if the price of spectrum per MHz-pop is lower than your assumption? How much sensitivity analysis did you engage in when arriving at the $10 billion figure?
- As the late Ronald Coase noted, auctions are exactly the method most useful for determining actual willingness to pay. Did you consider an auction structure in which the amount of incentive payments was not fixed, but a percentage of the actual extra amount companies are willing to pay for expedited access to the spectrum? If not, why not?

RESPONSE: Title III of the Communications Act gives the Commission broad spectrum management and licensing authority, as well as broad authority to place conditions on new licenses it assigns, including conditions relating to clearing existing licensees. Accordingly, the Commission has repeatedly adopted and auctioned overlay licenses and requiring new overlay licensees to cover the costs of relocating existing licensees. The Commission also has permitted new licensees to accelerate the relocation of existing licensees and free up spectrum for new uses sooner by negotiating early clearing agreements with the existing licensees.

The recent Report and Order regarding the C-band provides for accelerated relocation payments for eligible space station operators. These are not "incentive payments" as used with respect to other Commission auctions. The Report and Order required all incumbent space stations to relocate by 2025, and new licensees will be able to commence operations in the cleared spectrum at that time. The accelerated relocation payments were designed to encourage incumbent space station operators to expedite their transition out of the lower 300 megahertz of the band, which would increase the value of the entire transition to the American public. And providing for accelerated relocation payments should increase auction revenue, given that the payments are less than the increase that bidders place on license value given accelerated relocation.

The Report and Order explains in great detail how the Commission arrived at the amounts for accelerated relocation payments that are available to eligible space station operators, after taking into account the specific circumstances in this band and the extensive public record. It uses a conservative estimate of $10.52 billion on the potential value of *acceleration* to licensees, significantly below the estimated *total value* of the spectrum to licensees. And we set aggregate accelerated relocation payments $800 million below that—at $9.7 billion—to ensure that any payments offered would not exceed the value to overlay licensees. I am confident that our staff, primarily our expert economists in the Office of Economics and Analytics, did not overvalue this spectrum given how mobile wireless providers—the prospective overlay licensees—have repeatedly stated that the C-band is critical to the development of emerging 5G networks and technologies. And while I agree with Coase that auctions are the best means of determining a willingness to pay, implementing that here would have required some form of incentive auction, which the order explains would have been beyond our authority granted under the Spectrum Act.

Finally, I believe our decision in the C-band proceeding benefits spectrum policy and the opening of new bands. You are right that there is no more greenfield spectrum available—and that's precisely why it is critical that the Commission have a variety of tools available to address the particular circumstances of particular bands going forward. The accelerated relocation payments contemplated in our various overlay auctions and implemented in our C-band proceeding are one important tool to ensure America leads in 5G going forward.

MERGER CONDITIONS

The FCC approved the Sprint and T-Mobile merger subject to several conditions. The new company must meet certain deployment milestones, divest its Boost subsidiary, and not increase prices for three years.

- Are these conditions enforceable by the FCC? If not, then by what Federal agencies? How many FCC staff will be assigned or otherwise involved in monitoring New T-Mobile's commitments?

RESPONSE: The FCC can and will enforce these conditions. Staff attorneys and economists from the Wireless Telecommunications Bureau, the Office of Economics and Analytics, and the Office of General Counsel will play an active role in overseeing T-Mobile's compliance with its various commitments. In addition, at least five senior staff who were involved with the transaction will have specific oversight duties. Additionally, and as necessary, staff from the Enforcement Bureau will be available to provide assistance.

- Do the monetary penalties New T-Mobile might face for failing to meet these conditions exceed the benefits they received from merging, according to the filings they provided to the Commission? If not, then what incentive does the new company have to follow through on them?

RESPONSE: The penalty structure is designed such that if T-Mobile did not meet its commitments, the incremental cost would outweigh the incremental benefit. In other words, the conditions were specifically designed to ensure that the amounts T-Mobile would owe for failing to meet the benchmarks, especially the final few percentage points of the benchmarks, which are often the most expensive to meet, would exceed the amounts T-Mobile would save by failing to do so. In short, the conditions ensure that T-Mobile has the appropriate financial incentives to meet the conditions imposed by the Commission.

In the event that T-Mobile completely misses its benchmarks, after year 3 it would owe $750 million, and in year 6 it would owe $2.4 billion. Further, the $2.4 billion penalty would recur annually until the buildout commitments had been met. In the event that T-Mobile meets some but not all of its commitment, the penalties are designed to offer additional incentive beyond market forces for T-Mobile to follow through on its 5G buildout. Further, the Commission also recognized that there are some areas for which it would be otherwise unprofitable for T-Mobile to build its network but for the merger conditions and penalties it would incur. To that end, the *de minimis* penalties which are equal to a 2.5% overall miss in any benchmark are designed to create an additional cost for not building the final 1-2% of sites that but for the merger would be left unbuilt. Additionally, the penalties for rural misses are double those of the nationwide commitments, resulting in a minimum penalty of $50 million. This penalty would recur until the

commitments were fulfilled, preventing T-Mobile from writing off the cost as a one-time event, and instead maintaining long-term pressure for T-Mobile to offer high-speed 5G service to everyone they committed.

- What happens if New T-Mobile raises prices in the next three years? What happens if they raise prices significantly after three years?

RESPONSE: The price commitment is an enforceable condition for 3 years and the Commission could take enforcement action against T-Mobile in the event it were to violate the condition. We believe that the 3-year price commitment, in conjunction with the Boost divestiture, addresses likely harmful price effects and as such, we do not expect T-Mobile to raise prices significantly after 3 years. Indeed, the general industry trend for wireless telephone services has been one of decreasing prices.

- You have removed merger conditions after the fact in the past. What is stopping something similar from happening in this case?

RESPONSE: Conditions are sometimes superseded because of subsequent transactions. For example, the conditions imposed by the Commission in its approval of Comcast's acquisition of NBC Universal explicitly superseded some of the conditions imposed on Comcast by the prior Comcast-Time Warner-Adelphia order. Thus, in a subsequent transaction involving T-Mobile, it is possible that a future Commission could impose different conditions. Such action would take place only after the public has had a full opportunity to comment and only if it were in the public interest to do so.

The FCC also has occasionally imposed conditions that by their own terms end if certain circumstances occur, for example, if there is a dramatic change in market share. The Commission did not do so here. In certain decisions, the Commission also has provided that parties may petition for modification of a condition if they can demonstrate that there has been a material change in circumstances, or that the condition has proven unduly burdensome, such that the condition is no longer necessary in the public interest. However, we are not aware of any instances where the Commission actually has removed or modified a condition under these circumstances.

Additionally, the Commission has removed conditions when the predicate for the conditions has become undone and the conditions are no longer in the public interest or when a petition for reconsideration of those conditions has been filed. For example, the Commission removed various conditions it had imposed in the AOL-Time Warner proceeding imposed after Time Warner disentangled itself from a relationship with AT&T, and again after Time Warner, Time Warner Cable and AOL were no longer under common ownership.

In 2017, the Commission modified a condition as part of Charter's acquisition of Time Warner Cable and Bright House Networks in response to a reconsideration petition filed by the American Cable Association and NTCA-The Rural Broadband Association. Under that condition, Charter was previously required to build out broadband to residential areas; it remains obligated to meet that requirement and build out to the same number of new locations but no longer has to do a certain amount of that buildout in areas that already have broadband service.

In any event, with respect to T-Mobile and Sprint, no timely reconsideration petitions were filed seeking the removal of any conditions but we note that the California Public Utility Commission has ordered T-Mobile to request that the FCC slightly modify one of its conditions and T-Mobile recently made that request.

NET NEUTRALITY REMAND

The United States Court of Appeals for the DC Circuit remanded several issues relating to the Restoring Internet Freedom ruling back to the FCC. In February, the Commission issued a Bureau-level Public Notice and provided the public a limited to comment on the issues raised by the court.

- Tens of millions of comments were filed in the original internet freedom proceeding, and this remains an issue of intense interest by the public and Congress. Why was this notice issued at the bureau level, and not by the Commission? How did you determine the length of the comment period?

RESPONSE: In the *Restoring Internet Freedom* proceeding, after thorough review of an extensive record, the Commission reclassified broadband under Title I, its longstanding prior classification. The D.C. Circuit affirmed the Commission's decision to do so, consistent with prior Supreme Court and D.C. Circuit precedent. The court ordered a limited remand on three discrete issues but did not consider those issues significant enough to vacate, as the court concluded the Commission "may well be able to address" those issues on remand.

Given the importance of the issues, the Commission's Wireline Competition Bureau released a Public Notice seeking to refresh the record the day after the U.S. Court of Appeals for the D.C. Circuit issued its mandate. The Public Notice sought comment on the three discrete issues remanded by the court. This is common practice, as the Commission's Bureaus often issue Public Notices seeking to refresh the record in policymaking proceedings. As a matter of fact, the Obama-era FCC did exactly the same thing on *this very topic*. On February 19, 2014, shortly after the D.C. Circuit rejected the Commission's previous attempt to regulate the Internet, the Wireline Competition Bureau issued a Public Notice "to consider how the Commission should proceed in light of the court's guidance." *See* Public Notice, "New Docket Established to Address Open Internet Remand" (Feb. 19, 2014), *available at* https://docs.fcc.gov/public/attachments/DA-14-211A1.pdf. Notably, no current member of the Commission who voted for the 2015 *Title II Order* complained about the 2014 Public Notice being issued on delegated authority by the Wireline Competition Bureau.

Commission rules require that the agency provide a reasonable amount of time for interested parties to file comments in a rulemaking proceeding. *See* 47 CFR § 1.415. Here, the Bureau provided more than 30 days for comments from the release of the Public Notice and an additional 30 days on top of that for reply comments. The Bureau further extended these initial comment periods by 21 days *each* when it partially granted a request for an extension filed by various entities. In total, parties will have had more than two months to file comments and an additional 30 days for reply comments related to the narrow issues contained in the court's remand. Moreover, under the Commission's rules, parties may continue to make presentations to the Commission after the close of the formal comment and reply comment period, both written and oral, consistent with the Commission's *ex parte* rules. *See* 47 CFR § 1.1206.

SPECTRUM COORDINATION

The Federal government has several formal and informal mechanisms in place to resolve spectrum coordination issues, including the Interdepartment Radio Advisory Committee and the Policy and Plans Steering Group. These organizations are designed to allow the Department of Commerce to coordinate the executive branch's positions on spectrum assignment issues. Yet over the past several years, agencies seem to have circumvented this process and publicly raised concerns about the FCC's handling of certain spectrum policy issues, including the 24 GHz and the 5.9 GHz band.

- Do these events represent a significant difference from the past in the way agencies have communicated their positions about spectrum issues to the Commission?
- How does the Commission incorporate concerns of this nature into its rulemaking process?
- Does the Commission have recommendations on how to minimize the potential for additional conflicts of this nature?

RESPONSE: The Commission's decisions with respect to spectrum have been and will continue to be based on sound science and engineering. The 24 GHz auction (Auction 102) concluded on May 28, 2019, with 29 bidders winning 2,904 licenses and raising $2,022,676,752 in net bids for the Treasury. The auction made available 700 megahertz of spectrum in the 24.25—24.45 GHz and 24.75—25.25 GHz bands for commercial services and applications. The service rules for the 24 GHz band were coordinated with our federal partners through the Interdepartment Radio Advisory Committee (IRAC) and have been public for a long time. The FCC proposed to open up the 24 GHz band for mobile terrestrial use during the Obama Administration, in 2016. We then adopted the service rules for the 24 GHz band in 2017. In developing these rules, we followed the standard interagency coordination process, which involved all relevant agencies with equities in the matter.

Similarly, with regard to the 5.9 GHz band, the FCC's *Notice of Proposed Rulemaking* (NPRM) was properly coordinated with Department of Commerce's National Telecommunications and Information Administration (NTIA). Comments from Federal agencies are reflected in the publicly released draft. Any future order adopting final rules for the 5.9 GHz band likewise will be coordinated with NTIA under our established process. The Commission's NPRM refreshing its review of this spectrum teed up NTIA review of potential interference, particularly in the case of Department of Defense radar operations in 5.9 GHz band. The NPRM seeks comment on how best to protect those radars. We will continue to work with the Department of Defense through NTIA on the appropriate sharing/protection mechanisms.

With respect to any recommendations going forward, we continue to believe that coordination works best when federal agencies follow the IRAC process rather than freelance and go outside of that process, and would therefore encourage agencies to work with NTIA to ensure that the agreed-upon process for relaying agency feedback to the FCC is followed.

Questions for the Record Submitted by Congresswoman Torres

6 GHz

QUESTION: Unlicensed spectrum, which powers technologies like Wi-Fi, is critical to the U.S. economy, perhaps now more than ever before as workers choose to telecommute and limit travel due to coronavirus, and they need to stay connected to their colleagues through their Wi-Fi connection. I've heard that the 6 GHz band would enable multiple new wide-bandwidth Wi-Fi channels that are critical to a thriving economy. Next-generation Wi-Fi requires far more bandwidth than is available today.

- When will the Commission move forward to enable shared Wi-Fi access to the band?

RESPONSE: On April 23, 2020, the Commission unanimously approved rules to enable shared Wi-Fi access to the 6 GHz band.

QUESTION: On behalf of my constituents who are eager to make this transition to 5G, I hope the FCC keeps focus on this timeline. Now another issue that I know you have considered with respect to opening up more spectrum is the impact on public safety services. As a former 911 operator, I am concerned about ensuring that our emergency response operations are not disrupted. Incumbent public utilities and services in this band for critical communications. To name a few, incumbents provide backhaul for police and fire vehicle dispatch, coordination of railroad train movements, control of natural gas and oil pipelines.

- Previously, public safety telecommunications groups expressed concern with the research conducted on this issue. Has there been additional research done or commitments from the FCC to ensure incumbent users of this band that provide critical public safety services will not be disturbed?

We must balance these public safety concerns with the need to provide more 6 GHz bandwidth for consumers and general economic benefits.

RESPONSE: In the 6 GHz proceeding, parties representing incumbent and prospective users in the band, including those representing public safety entities, submitted numerous technical studies examining whether introducing unlicensed operations into the 6 GHz band would cause interruption to incumbent services. Experts within the Commission's Office of Engineering and Technology analyzed the complete record of these studies and recommended technical parameters that would not cause harmful interference to incumbents within the 6 GHz band.

The rules adopted by the Commission authorize standard power outdoors and low power indoor unlicensed operations. Standard power operations will be controlled by an Automated Frequency Control (AFC) process. The AFC ensures that unlicensed devices using standard power will only utilize frequencies within the 6 GHz band which are not used by incumbent services. This process will ensure that new unlicensed services using standard power will not cause harmful interfere to incumbent services. The Commission also emphasized that sufficient testing of AFC must be conducted prior to full-scale deployment of standard power devices.

Low-power indoor devices will be permitted to operate across the entire 6 GHz band without AFC, but—importantly—the restrictions limiting operations to indoor-only and at lower power levels are designed to prevent harmful interference to incumbent services within the 6 GHz band.

These rules were adopted after a thorough evaluation of the lengthy, comprehensive record, including review of the various statistical probability analyses using Monte Carlo simulation of a large area with hundreds of millions of unlicensed devices, as well as deterministic analyses such as link budget calculations of a limited area.

The extensive record and engineering analysis permitted the Commission to move ahead with full confidence that our rules would protect the operation of public safety fixed systems. Many factors support the Commission's engineering analyses and findings. The Commission's decision relied on the low transmit power level adopted in the final rules, building entry loss, non-continuous nature of the transmissions of the unlicensed systems with very low activity factor, low probability of using co-channel frequency over the 1,200 megahertz of spectrum in 6 GHz and other unlicensed bands, and other impairments between the indoor device and the public safety fixed receiver.

In all, the Commission's authorization of unlicensed operations within the 6 GHz band will usher in a new era of Wi-Fi, while protecting the important incumbent operations that operate in the band.

Auction Revenues and NG911/Broadband Funding

QUESTION: Chairman Pai, the FCC's recent decision to auction the C-Band was made over the objections of Commissioners Rosenworcel and Starks who both pointed out that the excess auction revenue would be better spent on priorities like NG911 instead of windfalls for incumbent satellite operators. If it's too late for the C-Band, do you foresee the FCC holding any other spectrum auctions that could generate funds for NG911 in the near future?

RESPONSE: I agree that there are many worthy purposes for which spectrum auction revenue could be devoted—and NG911 is at or near the top of the list. But we are required to follow the law, and under current law, it is illegal for the FCC to direct that revenue anywhere other than the U.S. Treasury. Since 2016, I have called on Congress to change this state of affairs. Ultimately, then, it is Congress, not the Commission, that must determine the use of auction proceeds—and it can still do so for upcoming auctions that have not yet occurred, like the C-band auction. The Commission also expects to hold more auctions going forward, but again it would be Congress's decision, not the Commission's, how to spend any revenues generated by such auctions.

Broadband Gap

QUESTION: There are nearly 3 million students that do not have access to the necessary broadband in both rural and urban communities. In 2014, almost 60,000 Inland Empire households were either unserved or underserved. This makes it more difficult for my disconnected constituents to perform critical tasks like completing job applications or doing their homework.

- What tools does the FCC have available to ensure that more households are accessing high speed Internet?

RESPONSE: Having grown up in rural Kansas, I have a deep commitment to expanding broadband to all corners of the country. That's why we've taken aggressive steps to remove

regulatory barriers to broadband deployment and reform our Universal Service Fund programs that support broadband deployment, both fixed and mobile. In January, we took our biggest single step to date toward closing the digital divide by establishing final rules for the $20.4 billion Rural Digital Opportunity Fund. This program will build on the success of the Connect America Fund Phase II auction and make available more than $20 billion over the next decade to support up to gigabit service to millions of unserved Americans who currently lack access to fixed 25/3 Mbps broadband.

Last month, we also sought comment on the 5G Fund for Rural America, which would make up to $9 billion in universal service support over 10 years available to carriers to deploy advanced 5G mobile wireless services in rural America. 5G represents the next leap in mobile wireless technology, bringing significantly increased speeds, reduced latency, and better security than 4G LTE networks, and enabling cutting-edge applications and technologies benefitting consumers, businesses, precision agriculture, education, and healthcare.

Questions for the Record Submitted by Congressman Tom Graves

Rural Digital Opportunity Fund

Chairman Pai, thank you for your leadership on the Rural Digital Opportunity Fund. This is certainly a needed initiative that will benefit citizens all over the country. Currently, the RDOF framework proposes that project eligibility be based on FCC maps. The State of Georgia has invested in an unprecedented broadband service mapping project to obtain an accurate representation of where residents and businesses need to be connected and where connectivity is lacking. Georgia's new maps meet the future mapping criteria the FCC will use.

Question: Will the FCC allow the use of state produced maps that meet the FCC's future standards in determining eligibility for RDOF?

RESPONSE: In January, we established final rules for the $20.4 billion Rural Digital Opportunity Fund. It will build on the success of the CAF Phase II auction and provide more than $20 billion over the next decade to support up to gigabit service to millions of unserved Americans through a competitive reverse auction in two phases. Phase I will target support to wholly unserved census blocks—those areas where our existing data tell us there is no 25/3 Mbps service at all—in order to make sure that the areas most in need will get broadband service quickly.

Phase II will fill in the remaining coverage gaps by supporting networks that will serve partially unserved census blocks, along with areas not won in Phase I. Phase II will leverage the Commission's Digital Opportunity Data Collection, the new granular, precise broadband mapping initiative the agency adopted this past August. The recently enacted Broadband DATA Act validates the Commission's decision in the August Report and Order to directly incorporate broadband mapping data from state, local, and Tribal governments, as well as "crowdsourced" coverage data directly from members of the public. Such data, of course, could include data from the State of Georgia. The new maps will ensure that Phase II of the Rural Digital Opportunity Fund uses the most up-to-date and accurate broadband deployment maps available to direct support where it is needed.

Universal Service Funds

Because of the coronavirus risk, many schools in exposed/infected areas are temporarily closing, and switching to on-line education, where broadband is available. Unfortunately, some seven million students are in regions where there is no broadband at home (according to NTIA). If students cannot obtain Internet access at home during school hours when online education occurs, the problem becomes not just a Homework Gap but an Education Gap.

I understand that some communities have initiated hot spot lending programs that can provide quick, low-cost wireless broadband service to homes, but most communities do not have sufficient funding to implement these programs.

Question: Can the FCC make expedited Universal Service Funds available to communities so that they can set up hot spot lending programs when the schools are closed, similar to the way the FCC made funding available to Puerto Rico in the wake of Hurricane Maria?

In general, what emergency measures can the FCC take to help connect students to broadband at home so they can continue their educations?

RESPONSE: Since March, I have been working with Congress to appropriate dedicated funding for a remote learning initiative—one that will give students across this country an opportunity to connect with their teachers and online educational resources. Fortunately, the recently enacted Coronavirus Aid, Relief, and Economic Security Act (CARES) Act's Education Stabilization Fund provides one avenue for just such funding. In the CARES Act, the Elementary and Secondary School Emergency Relief Fund provides more than $13 billion in grants that elementary and secondary schools can use for purposes that include remote learning. In addition, the Governor's Emergency Education Relief Fund makes approximately $3 billion in emergency block grants available to governors to decide how to best meet the needs of students, and such funds can be used for remote learning. Together, these Funds make $16 billion available to governors and schools, states and localities, to connect students to remote learning resources. The FCC is coordinating with the U.S. Department of Education on this effort, and I look forward to working with Secretary DeVos, Congress, governors, and schools and school districts across the country to ensure these funds are properly spent to get our students connected.

Complementing this effort, we have also taken steps to help those schools that participate in the Commission's E-Rate program transition to online learning by waiving and extending several program rules and deadlines. One such waiver of the Commission's gift rule enables service providers to offer, and program participants to solicit and accept, free broadband connections, devices, and other services that support remote learning, which would otherwise be prohibited under our rules. Similarly, we have extended a number of E-Rate program deadlines to alleviate administrative and compliance burdens on schools and enable them to focus on transitioning to remote learning. This relief includes a 35-day extension of the application filing window for funding year 2020 and, more recently, a one-year extension of the so-called service implementation deadline for special construction to deploy fiber. Additionally, to facilitate community connectivity during the coronavirus pandemic, we clarified how schools and libraries may permit the general public to use E-Rate-supported Wi-Fi networks.

Finally, it is important to note the FCC has been working with the private sector so that students are connected with broadband at home. For example, over 700 broadband and phone service providers have taken the Keep Americans Connected Pledge, and as a result of that Pledge, many households with students have been able to maintain their broadband connectivity. Moreover, we have encouraged providers to go above and beyond the Pledge and many have, including virtually all of the largest broadband providers in the country. As a result, many providers are now offering low-cost or free broadband service to households with students who did not previously have broadband access.

FCC Commissioner Brendan Carr
Questions for the Record
House Subcommittee on Communications and Technology Hearing:
"Oversight of the Federal Communications Commission"
October 25, 2017

The Honorable Brett Guthrie

1. **I understand that NHTSA has an open rulemaking on the matter of V2V communications and is coordinating with the Commission on whether or how to share the spectrum currently allocated to Intelligent Transportation Systems (ITS) in the 5.9 GHz band. Are you willing to commit to working with NHTSA and other stakeholders on this issue to ensure the band remains available for ITS use in the future, and free from in-band or out-of-band emissions from other potential users?**

   In 2013, the FCC launched a rulemaking that sought comment on ways that the agency might open up the 5.9 GHz band for unlicensed use while balancing the interests of incumbent DSRC interests. In 2016, the Commission issued a Public Notice seeking to refresh the record in the FCC's proceeding. Though I was not a Commissioner when the agency took those actions, I look forward to working with all stakeholders as the FCC moves forward with its proceeding and reaches a determination that best serves consumers and the public interest. As always, I welcome the opportunity to learn from NHTSA's views on these important issues.

2. **There are critical infrastructure industries like electric utilities whose wireless needs are absolutely paramount when it comes to reliability and freedom from interference, as drastic consequences can follow when their networks are disrupted by outside users. Are you willing to work with utilities on how best to harden their networks, and is there anything you can share on work you've already been doing to meet their wireless reliability needs?**

   Commission licensees expect to use their licensed spectrum free from harmful interference. And the FCC has a key role to play when it comes to ensuring that our communications networks are hardened against cyber and related attacks that seek to disrupt communications networks. I support the FCC's efforts, in conjunction with the Department of Homeland Security, to address these issues and promote resilient and reliable communications networks. I welcome the chance to continue to work with stakeholders on these important issues.

Attachment—Additional Questions for the Record

Subcommittee on Communications and Technology
Hearing on
"Accountability and Oversight of the Federal Communications Commission"
May 15, 2019

The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Anna G. Eshoo (D-CA)

1. **During the worst fire in California's history, Verizon throttled the data speeds of Santa Clara County firefighters, hindering their ability to communicate.**

    a. **If the 2015 Open Internet Order wasn't repealed, could this practice have been considered a violation of the ban on "unjust and unreasonable" business practices?**

Response: The FCC majority stated in the *2015 Open Internet Order* that "a broadband provider may offer a data plan in which a subscriber receives a set amount of data at one speed tier and any remaining data at a lower tier." *2015 Open Internet Order* at para. 122. The majority thus made clear that, under the *2015 Open Internet Order*, a broadband provider would not run afoul of the "no throttling" rule by engaging in that type of conduct.

    b. **Has the FCC taken any actions to avoid a repeat of this issue in California and other parts of the country by Verizon or other ISPs?**

Response: As noted above, the *2015 Open Internet Order* did not expressly prohibit the type of conduct at issue here. Because of the FCC's 2017 *Restoring Internet Freedom Order*, ISPs are now required to provide clear public disclosures about the services they provide to consumers, which are subject to potential enforcement by the FTC.

2. **Under the 2015 Open Internet Order, the FCC could investigate possible violations of bright-line prohibitions of net neutrality and other "unjust and unreasonable practices."**

    a. **Since the 2017 Restoring Internet Freedom Order, has the FCC been investigating whether ISPs are engaging in blocking, throttling, or paid prioritization practices, both as disclosed by ISPs and undisclosed practices?**

Response: The *2017 Restoring Internet Freedom Order* adopted a transparency rule that requires ISPs to publicly disclose information about their network management practices,

performance characteristics, and commercial terms of its broadband Internet access services. The *Order* also requires ISPs to either make such disclosures on a publicly available, easily accessible website or provide the disclosure directly to the FCC. *2017 Restoring Internet Freedom Order* at para. 215.

Pursuant to a December 2017 Memorandum of Understanding between the FCC and the Federal Trade Commission, the FCC reviews informal complaints concerning ISPs' compliance with the disclosure obligations set forth in the transparency rule. Because of the FCC's 2017 *Restoring Internet Freedom* decision, the FTC is now empowered to investigate and take enforcement action against ISPs for violations of their disclosures, including any violations that involve blocking, throttling, or paid prioritization.

b. If not, would the FCC even know if "Over the past year, the Internet has remained free and open," as Chairman Pai stated on January 2, 2019?

Response: Prior to the FCC's *2015 Open Internet Order*, consumers and innovators alike benefited from a free and open Internet. After a two-year experiment with heavy-handed regulation—one that saw investment decline, broadband deployments put on hold, and innovative new offerings shelved—the FCC returned to this proven regulatory approach. And Americans across the country are now seeing the results. Internet speeds are up nearly 40%. Americans saw more fiber broadband built to their homes and businesses last year than ever before. The number of small cells put up in this country increased from around 13,000 in 2017 to more than 60,000 in 2018. The digital divide—the percentage of Americans lacking access to high-speed Internet—narrowed by almost 20 percent last year alone. While there is much more work to do to secure U.S. leadership and ensure every American has a fair shot at next-generation connectivity, we are now heading in the right direction. The FCC's new policies are working.

3. The National Verifier has launched in 16 states where it lacks access to any databases for state-administered programs, such as the Supplemental Nutrition Assistance Program and Medicaid. Should an individual be informed that the National Verifier was not able to confirm their eligibility, they could reasonably consider this a denial from Lifeline, even though they may be eligible.

a. Given these issues, what specifically is the FCC or USAC doing to ensure the National Verifier connects with state databases in the states where it has launched or where it is planning to launch, and what is the timeline to do so?

Response: As of March 2019, the Lifeline National Verifier had been launched in 27 states and territories, with plans to add more states underway. Also as of March 2019, the National Verifier was able to check an automated connection to a state eligibility database for 93% of subscribers in states where the National Verifier has launched. Where the National Verifier cannot connect automatically to a state eligibility database, then the consumer's eligibility is determined through a manual review process. I understand that the FCC and USAC are also working to stand up

additional, automated connections for the purposes of checking eligibility that could be up and running later this year.

b. Given the above issues regarding the rollout of National Verifier, why is the FCC pushing forward to launch in more states rather than focusing on improving connections to federal and state databases in states where National Verifier is currently deployed?

Response: The National Verifier is important in helping to mitigate the burdens on eligible consumers seeking to sign up for Lifeline service. Additionally, it is key to helping prevent waste, fraud, and abuse in the Lifeline program by ensuring that carriers are not enrolling ineligible individuals. I believe we should encourage an expeditious rollout of the National Verifier across the country.

4. As the FCC considers USTelecom's petition for forbearance from key provisions of the Telecommunications Act of 1996, what has the FCC done to consider the impact of granting this petition on (i) small and medium-sized ISP's building out the fiber networks needed for upgrading our country's wireless infrastructure to 5G and for closing the digital divide; and (ii) federal, state, local, and tribal government agencies, particularly those that will continue to rely on TDM-based telephone services through the continued availability of resale requirements?

Response: I have not made a final decision on the USTelecom petition at this time. My review of relevant issues and considerations is still ongoing. However, I will look at all information filed in the record through the lens of the statutory factors set forth in Section 10 of the Communications Act.

5. Should the FCC further eliminate media ownership rules as it is considering, Americans may experience a sharp reduction in the breadth and diversity of voices available in any local media market. One entity could control all broadcast TV stations, local newspapers, and radio stations. This is a direct rebuke to a fundamental value that underpins our democracy. Please share whether you are considering such outcomes and to what degree you have concerns about the consolidation of media ownership.

a. Has the FCC's newly created Office of Economic Analysis provided input on the impact of eliminating media ownership rules on consumer prices in the video marketplace?

Response: In December of 2018, the FCC voted to seek comment on its broadcast ownership rules, as the Commission is required by statute to review the rules every four years. I am still reviewing the record in this proceeding, and I have not made any final decisions. The Office of Economic Analysis is required to review and provide input on all Commission rulemakings, and

I will consider their input, as well as all other relevant information, as I continue my review of the record in this proceeding.

6. **The FCC is considering a proposal to alter what may be considered toward the statutory maximum of five percent franchise fees (MB Docket No. 05-311). This would negatively impact the access of communities to public, educational, and governmental (PEG) programming. As I stated in my February 22, 2019 letter to the FCC, Congress clearly intended for communities to have access to PEG. The legislative history of the 1984 Cable Act explicitly states that franchise fees are only made up of monetary payments and do not include PEG contributions (H.R. Rep. No. 98-934 (1984)). Congress made its intent on this matter explicit and clear.**

    a. **Under what statutory authority is the FCC considering this proposal which would have the effect of including PEG contributions in franchise fees?**

Response: In September of 2018, the FCC voted unanimously to seek comment on a proposal to ensure that cable franchise fees do not exceed the statutory maximum of five percent. My staff and I have met with a variety of stakeholders on this proceeding. I have not made a final decision in the PEG proceeding. My review of the relevant legal, policy, and other issues is ongoing.

Attachment—Additional Questions for the Record

The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Yvette D. Clarke (D-NY)

1. **It is wonderful to see how technology has broken down barriers for people with disabilities, but I am concerned this same technology can introduce new challenges for consumers. As the FCC considers moving to fully Automated Speech Recognition or ASR, I am concerned that fully automated ASR might not work as well for certain types of accents or voices. This could become a serious problem as we move towards widespread adoption of such services. Certain consumers might be left behind.**

    a. **What has the FCC done to investigate whether fully automated ASR for IP CTS does not feature implicit or inadvertent bias?**

Response: The FCC has an obligation to ensure that telecommunications services are available to Americans with hearing loss. As such, the Telecommunications Relay Service Fund, which subsidizes the cost of IP CTS, serves vitally important purposes. This is an issue that has been raised in the record in a pending rulemaking. I have not made a final decision in this proceeding and my review of the record is ongoing.

    b. **Will you commit to undertake such studies before certifying an ASR only provider?**

Response: Before certifying an ASR-only provider, we must ensure that doing so is in the public interest, which includes the provider's ability to comply with our TRS service standards.

2. **In considering the UST petition, does the Commission have the flexibility to take into account disparate market conditions or is it required to simply approve the petition as filed? Does the Commission have the flexibility to consider the impact of a natural disaster in a local market, such as Hurricane Maria in Puerto Rico, and how the local market conditions were and still are being impacted post-hurricane?**

Response: The FCC does not have to approve forbearance petitions as filed. In addition, the D.C. Circuit has determined that Section 10 of the Communications Act "imposes no particular mode of market analysis or level of geographic rigor."

3. **Will the Commission take into account the special circumstances of how Hurricane Maria devasted the local telecom infrastructure, as well as the local economy, into its consideration of the UST petition and whether such deregulation should occur at this time in Puerto Rico?**

Response: I have not made a final decision on the USTelecom petition at this time. My review of relevant issues and considerations is still ongoing.

4. **The Telecommunications Act of 1996 did not preempt local regulatory bodies from the Commission's evaluation of whether a market was competitive or not and thus warranted certain regulatory relief.**

    a. **Will you give deference to the input from the local jurisdictions as to whether the local market conditions warrant deregulation at this time, particularly in the case Puerto Rico where the recovery efforts are still ongoing?**

Response: I believe the FCC should always give due consideration to the views expressed by local jurisdictions in FCC proceedings.

Attachment—Additional Questions for the Record

The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Darren Soto (D-FL)

1. **Late last year, the FCC initiated a proceeding looking at how to mitigate space debris. While I think it is a positive step to consider how to address this problem, the Commission may not have the technical expertise or the resources necessary to develop or enforce the complicated regulations it is considering proposing. Further, I understand the FCC has requested a reduced budget for these activities in FY20.**

    a. **Do you agree that it is important to ensure that any orbital debris mitigation regime be straightforward and enforceable?**

Response: Six years ago, NASA estimated that there were half a million debris objects in orbit around Earth. These objects can cause catastrophic collisions with spacecraft—and their number is growing as interest in space has increased for commercial and defense purposes. The next generation of satellites will fly at a lower altitude and be much more numerous than previous generations. The FCC approved requests for nearly 8,000 such low-earth orbit satellites in our November meeting alone.

There is no question that the possibility of thousands of new satellites, passing each other in low-earth orbit at hypervelocity, presents complex questions and will likely require a new set of rules that address collision risks. The safety and economic interests at stake require the federal government to get orbital debris issues right. But as I have stated on a number of occasions, it is far from clear that the FCC is the right federal agency to make these assessments. I thus share some of the concerns indicated in your question above. In my view, the FCC should look to other agencies and bodies with deep background and expertise on orbital debris issues for their leadership on appropriate mitigation measures.

    b. **Please provide me with the number of employees supporting this project in total and the number of employees on this project with undergraduate or graduate degrees in relevant technical fields, specifically: aerospace, aeronautical, and/or astronautical engineering. Given the reduced budget you are requesting for FY20, is the FCC able to hire additional technical experts with degrees in these fields?**

Response: I refer you to the Chairman of the FCC for any questions on the status of FCC employees working on this effort.

2. **What is the FCC currently doing to ensure that minority programmers are being included by providers; especially in Metropolitan Statistical Areas (MSA) with large minority communities that are currently being underserved?**

Response: Diversity is one of the touchstones of the FCC's media policy. At the Commission, we've been working on policies that reduce barriers to entry into the media marketplace, including through the FCC's radio incubator program, which aims to encourage new entrants into the media industry by providing access to capital, training, and expertise for new entrants. I was glad to cast my vote in favor of establishing that program, and the Media Bureau began accepting applications this month. Since being reestablished in September of 2017, the FCC's Advisory Committee on Diversity and Digital Empowerment has been advising the Commission on ways to increase diversity in the technology and telecom industries, and I welcome their continued input on ways the FCC can further encourage diversity in media.

Attachment—Additional Questions for the Record

The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Robert E. Latta (R-OH)

1. **When Congress passed the Americans with Disabilities Act in 1990, it directed the Commission to ensure that hearing and speech-impaired individuals be able to place and receive assisted telephone calls. Congress also directed that these telecommunications relay services be paid for equitably - with intrastate assessments used to fund intrastate services and interstate assessments used to fund interstate relay services.**

   The Commission chose to "temporarily" fund the entire telecommunications relay service program through only interstate (and international) assessments and then repeated that "temporary" funding approach in 2007 when internet protocol service calls (IP CTS) were added to the program.

   As I understand it, last year the Commission proposed in its Further Notice of Proposed Rulemaking (FNPRM) on IP CTS to revise the funding mechanism so that all IP CTS calls would be recovered from all providers of, intrastate, interstate and international telecommunications, interconnected VOIP and non-interconnected VOIP providers.

   Commissioner Carr, would you support moving the provisions of the 2018 FNPRM related to correcting the "temporary cost recovery method" expeditiously to create a permanent method in advance of the 2020-2021 TRS Fund year?

Response: As you note, in June 2018, the FCC adopted an item that proposed to expand the IP CTS contribution base to include a percentage of annual intrastate revenues from telecommunications carriers and VoIP providers. The item proposed to expand the IP CTS contributions base because the service is available nationwide and it is therefore no longer necessary to continue an interim mechanism originally intended to spur nationwide deployment. Additionally, the Commission noted that, because most IP CTS end-user revenues and minutes of use are intrastate, it is inequitable to continue leaning on carriers whose traffic is primarily interstate. I am still reviewing the record we received in this particular proceeding. That said, as we move forward with reforming IP CTS, I am focused on ensuring stability for the TRS Fund and low prices for IP CTS consumers.

2. **My concern is about how we deliver broadband to all Americans, especially unserved and underserved Rural America. One technology will not be the panacea for this challenge, but we will need a combination of solutions. Can you**

comment on what role you see spectrum playing in rural America and discuss if you think spectrum sharing is a feasible part of that solution?

Response: Bringing more broadband to more Americans has been my top priority at the FCC. And nowhere is the challenge of providing fast Internet access greater than in rural America. As you point out, no single technology will meet that challenge, and so the Commission has a number of programs that encourage fiber construction, fixed wireless builds, and mobile service, among others.

Spectrum is a critical input in our efforts to bridge the digital divide. We saw this first-hand from the top of a grain elevator in Sugar Ridge, Ohio, where a WISP beamed 25 Mbps broadband to more than 8,000 customers, including the local Sheriff's Department. The WISP provided broadband across farms and dirt roads using 900 MHz and 3.65 GHz spectrum. As you know, the 3.5 GHz band—which includes some of the spectrum the Sugar Ridge WISP uses—is shared with the Navy.

The Commission concluded a proceeding in October to put the 3.5 GHz band to more robust use. We worked with our federal partners to share the band with private sector users. And by creating an innovative dynamic-sharing arrangement between users, we were able to protect incumbents, provide more robust licensed use, and offer at least half the band for General Authorized Access. We hope to see the band be put to further commercial use later this year, which may be a model for spectrum-sharing when a band cannot otherwise be cleared.

Attachment—Additional Questions for the Record

The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Greg Walden (R-OR)

1. **Would you support the Chairman's effort to move forward in evaluating appropriate allocation of the 5.9 GHz band at this time? Why or why not?**

Response: Yes, I would. The 5.9 GHz band is a valuable swath of spectrum. It sits adjacent to the 5.8 GHz unlicensed band, which, in combination with the 2.4 GHz band, carries the lion's share of Internet traffic, including a majority of smartphone traffic in the U.S. The adjacent 6 GHz band also is being considered for additional commercial use. The 5.9 GHz band has been allocated for automotive uses but has not been robustly deployed. It is important that we consider a full range of options so that we can make an informed decision about the future use of the band.

Attachment—Additional Questions for the Record

The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable John Shimkus (R-IL)

1. **Under the FCC's oversight, the Universal Service Administrative Company (USA) has worked to establish a "National Verifier" system to combat fraud in the Lifeline program by ensuring all applicants are eligible for Lifeline benefits. It is my understanding USAC is actively transitioning many states from "soft-launch" status, in which participation in the National Verifier system is voluntary, to a mandatory verification system. I want to ensure that we expeditiously continue this transition to a more secure and accurate verification system. Please describe how the FCC, working with USAC, will continue the push for implementation of a robust mandatory National Verifier system.**

Response: The National Verifier is key to helping prevent waste, fraud, and abuse in the Lifeline program by ensuring that carriers are not enrolling ineligible individuals. I believe we should take all steps needed to continue to encourage an expeditious rollout of the National Verifier.

As of March 2019, the Lifeline National Verifier had been launched in 27 states and territories, with plans to add more states underway. Also as of March 2019, the National Verifier was able to check an automated connection to a state eligibility database for 93% of subscribers in states where the National Verifier has launched. Where the National Verifier cannot connect automatically to a state eligibility database, then the consumer's eligibility is determined through a manual review process. I understand that the FCC and USAC are also working to stand up additional, automated connections for the purposes of checking eligibility that could be up and running later this year.

Attachment—Additional Questions for the Record

The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Susan W. Brooks (R-IN)

1. **I have heard much about how the Commission's order to speed approval for 5G technology deployment has been helpful, but can you elaborate on how else Congress or the Commission can support timely build out of 5G infrastructure?**

Response: The FCC's efforts to accelerate 5G deployment are working. Internet speeds are up nearly 40 percent. More fiber was built last year than ever before. The number of small cells deployed increased from 13,000 in 2017 to 86,000 in 2018. And the U.S. now has the world's largest 5G build. Many of the reforms the FCC put in place advanced ideas championed by you in Congress and by state and local leaders in their own legislatures.

Going forward, one of the challenges to building next-gen wireless infrastructure in our country is a shortage of qualified tower techs. Industry estimates that it could hire another 20,000 workers to build, scale, and upgrade infrastructure so that we can win the global race to 5G. A few months ago, I announced an initiative to address workforce training at Aiken Technical College in South Carolina. Aiken has developed a tower training program that, at a relatively low cost and in just 12 weeks, can give a student with no prior tower experience the training she needs to gain certification and land a job as a tower tech. At the time I visited Aiken, every student who had completed the course had been offered a job. Aiken provides a model that should be replicated across the country. I am working with other federal agencies on a plan to provide more opportunities like Aiken's, and I am grateful for Congressional leadership on this issue, including most recently Rep. Walberg and Rep. Clarke's TOWER Infrastructure Deployment Act.

Another major obstacle to building 5G infrastructure is the federal government's own siting processes. You have been a leader on this issue, including streamlining broadband infrastructure permissions on federal buildings and property as part of the appropriations bill that was enacted last spring. Too many rural communities lack broadband because they happen to be next to federal land that is impeding connectivity. The federal agencies that have jurisdiction over these siting issues should continue to clear regulatory roadblocks to infrastructure buildout.

2. **I firmly believe that letting the private sector compete is the best way to ensure the U.S. will be the world leader in 5G technology. Can you address criticisms of that idea and the notion that the U.S. should nationalize a wholesale 5G network to somehow ensure its leadership in this space?**

Response: You are correct: America will win the race to 5G through the power of free markets, not government control. When an ill-conceived plan to have the federal government nationalize a 5G network was first floated this spring, I wrote an op-ed detailing its flaws. The op-ed is

available here: https://www.nationalreview.com/2019/03/nationalizing-5g-is-not-the-way-to-beat-china/

Time and again, history teaches us that fighting China with China-like policies will fail. The 4G networks in the U.S. are the envy of the world. What's not? Our government-run infrastructure projects, such as our crumbling roads and bridges and failed high-speed-rail projects. We cannot expect anything better from a government-run 5G network. In fact, many European countries have taken a government-directed approach to broadband, and the result has been network investment at half the level we see in the U.S.

If there is a threat to our pole position in the race to 5G, it's too much government interference, not a lack of government control. We need to stay focused on unleashing private sector investment in infrastructure by cutting red tape and unnecessary government impediments to buildout. That is how the U.S. won the race to 4G, and that's the winning playbook for 5G.

Attachment—Additional Questions for the Record

The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Tim Walberg (R-MI)

1. **During the hearing, I briefly asked about the need for a more robust, capable workforce for the communications industry. As you know, even with unlimited spectrum, siting reforms, or Federal dollars, none of these will get 5G, next generation fiber networks, or broadcasting infrastructure into the market without a skilled, professional workforce capable of deploying it in a timely manner.**

   How is the Commission approaching this workforce issue, and what steps can the Commission take to get all stakeholders to the table and create good, high-paying jobs that maintain technological leadership here in the United States?

Response: Having a skilled workforce in place is essential to winning the race to 5G and deploying next-gen networks in communities across the country. Right now, industry estimates that it could add an addition 20,000 tower techs to meet current and future demand for infrastructure buildout. That's why, in April, I announced a 5G jobs initiative that looks to community colleges as a pipeline for 5G jobs. It builds on a program at Aiken Technical College in South Carolina, which can take someone with no skills and, through a seven or 12-week program, provide them the skills necessary to land a good-paying job as a tower tech. I am working with Aiken Tech, the National Wireless Safety Alliance, and other stakeholders to stand up more of these programs at community colleges and technical schools across the country.

   a. **Would the Commission benefit from a longer-term viewpoint and approach to this issue if it were elevated and authorized in statute to a full advisory committee as opposed to a working group under an existing advisory council?**

Response: I welcomed the introduction of the TOWER Infrastructure Deployment Act and am grateful for the leadership that you and others in Congress have shown on workforce development. These efforts are vital to bringing attention to the shortage of tower techs needed to deploy 5G and coordinating the stakeholders necessary to create more community college tower training programs and apprenticeship opportunities.

Subcommittee on Communications and Technology and
Hearing on
"Accountability and Oversight of the Federal Communications Commission"
December 5, 2019

The Honorable Brendan Carr, Commissioner, Federal Communications Commission

The Honorable Anna G. Eshoo (D-CA)

1. The decision to increase minimum service standards was proposed in conjunction with a port freeze. Coupling these items was essential for increasing service, while also reducing waste, fraud, and abuse. Why is the FCC moving forward with just increasing minimum service standards which has caused carriers to cease providing Lifeline services?

Response: The Lifeline program provides an incredibly important and valuable service. That is why I was pleased the FCC acted recently to prevent an extraordinary spike in minimum service standards that would have been catastrophic to the program—a spike that would have resulted from changes a prior FCC made to the program. I am glad this FCC acted to provide Lifeline subscribers relief from that prior approach.

2. The FCC found that "the large increase in the minimum standard for mobile broadband usage could unduly disrupt service to existing Lifeline subscribers." Would the FCC suspend the implementation of next year's minimum service standard if a similarly large increase is anticipated again?

Response: The record is still developing on how the program is evolving. I will keep an open mind toward all proposals that would improve the program, and I will consider all options before us that are in the public interest.

3. Is the FCC considering opening a new proceeding to revisit the appropriate formula for calculating minimum service standards for Lifeline mobile broadband service?

Response: I am not aware of any new proceeding, but I am always open to new ideas that could improve the program.

4. You've raised network security issues as a major concern of yours. Beyond supply chain issues, which the FCC and our Subcommittee have worked on, what other recommendations can you make relative to securing our nation's wireless networks—for example, addressing SIM swaps, carriers' usage of dated encryption and authentication algorithms, and the threats of cell simulators or IMSI catchers?

Response: Securing our telecommunications supply chain is a top priority of the Commission, and I am pleased to see concerted efforts in the Administration, Congress, and Commission to meet this challenge. As you note, the Commission has an open proceeding on supply chain issues. In November, we unanimously approved an order that barred USF funds from being used to purchase equipment and services from companies that pose a national security threat. We initially designated Huawei and ZTE as companies covered by the subsidy prohibition, and the accompanying FNPRM contemplates ripping and replacing existing equipment from potentially dangerous companies.

There is more that policymakers can do to ensure that our networks are secure. I am especially interested in accelerating the use of software and virtualization of our networks to leverage enduring American advantages in research and IP development. Many have observed that certain hardware in our 5G networks lacks a U.S.-based supplier. While we are fortunate to have excellent hardware partners with trusted governance and controls and which are headquartered in allied countries, for our security and economic opportunity, it would behoove the U.S. to have a more robust domestic supply chain. The U.S. is the world leader in software innovation, and that is not happenstance—it is in large part due to our leading research institutions and culture of innovation. As networks advance, the importance of software will increase relative to hardware, which will accrue to our country's advantage, and the likelihood of U.S.-based leaders will increase. To promote this shift towards software, there exist a number of policy levers, including direction of research support and reducing regulatory barriers to deploying both edge and low-latency cloud computing.

5. Some are proposing allocating spectrum in the 6 GHz band for licensed use, by relocating incumbents to the 7 GHz band, though that band is currently occupied by government entities, including the Department of Defense. How long has the FCC been working with the federal government on allocation of 7 GHz?

Response: I must refer you to the Office of the Chairman on the status of inter-agency coordination.

6. As you have recognized, the need for unlicensed spectrum is as high as ever, and it's growing. Some have raised concerns about harmful interference to microwave services if unlicensed devices would be allowed to operate in the 6 GHz band. Do you have the data necessary to create rules for these two services to coexist?

Response: The FCC has an active proceeding under way examining the best way to address this issue. I look forward to reviewing the record, assessing the data available, and reaching a determination that is in the public interest.

7. One promising innovation in wildfire mitigation is the Falling Line Conductor that uses low-latency, private LTE networks to depower a broken line before it hits the ground and becomes a fire hazard. Do you have a view on how such technologies can help mitigate wildfire threats and the need for preemptive electrical shutoffs? When will the FCC complete its 900 MHz proceeding that impacts the ability of utilities to use such technologies?

Response: Mitigating the effects of wildfires is incredibly important, so I support all efforts to that end. I must refer you to the Office of the Chairman on timing matters.

8. On June 11, 2019 at a USTelecom Forum on robocalls, Chairman Pai said "Now that the FCC has given you the legal clarity to block unwanted robocalls more aggressively, it's time for voice service providers to implement call blocking by default as soon as possible." I couldn't agree more. Have carriers responded to this call to action? Have companies raised legal, technical or other objections with these actions requested?

Response: This FCC has elevated robocalls to our primary enforcement priority, and we have issued a number of decisions to combat these unlawful calls. Our work at the FCC is far from done. Therefore, I look forward to continuing to work with my colleagues on the Commission and the private sector to further curtail unwanted calls. I would refer you to Chairman Pai for more specifics on his remarks.

9. At the same USTelecom event in June, Chairman Pai said that "USTelecom has been particularly helpful in making sure that we can quickly trace scam robocalls to their originating source." How successful has USTelecom's Industry Traceback Group (ITG) been in combatting robocalls?

Response: Our work to combat illegal robocalls is not over. There is more the FCC and the private sector can do to combat these unwanted calls. I look forward to working to achieve that goal. I would refer you to Chairman Pai for more specifics on his remarks.

10. A *Wall Street Journal* article titled "Small Companies Play Big Role in Robocall Scourge, but Remedies Are Elusive" states that "The FCC has asserted limited jurisdiction over VoIP providers, an agency spokesman said." What prevents or limits the FCC from using existing statutory authority to take enforcement actions against VoIP providers?

Response: The scope of the FCC's authority is both defined and limited by the laws Congress passes. Therefore, I would welcome any additional grants of authority that Congress finds appropriate for the FCC to exercise in our work to combat illegal robocalls. While I am not aware of the specific limitation the agency spokesperson had in mind, I know that many robocalls originate overseas, and there are limits on the actions the FCC can take against call originators in that context.

11. The FCC's "Report on Robocalls" (CG Docket No. 17-59; February 2019) states that "Five providers that had been identified as uncooperative in traceback have taken steps to participate going forward." Have these five providers continued cooperating with traceback efforts? Do *any* providers remain that are not being cooperative?

Response: I would refer you to the Chairman's Office for the most current information on the FCC's work on this issue.

The Honorable Peter Welch (D-VT)

1. A lack of broadband connectivity can impact all aspects of our lives: keeping children on the wrong side of the homework gap from realizing their full potential, posing barriers to telehealth solutions that can improve care, keeping farmers from capitalizing on advancements in precision agriculture, and limiting economic opportunities for workers and small businesses. However, I have been encouraged by the Commission's support of innovative solutions, specifically TV white space, that can enhance the pace, reach and cost-effectiveness of broadband deployment in rural communities. The adoption of a final order in the TV white space (TVWS) reconsideration proceeding earlier this year marked an important first step, and I encourage the Commission to build on this step by issuing a Further Notice of Proposed Rulemaking (FNPRM) to address remaining regulatory hurdles to greater TVWS deployment as soon as possible. By taking this step, the Commission can update its rules surrounding TVWS, which will increase the potential for rural broadband deployment and, subsequently, the availability and adoption of Internet of Things (IoT) applications throughout rural areas.

    a. Will the Commission make the adoption of a TV White Space Further Notice of Proposed Rulemaking a priority to complete as soon as possible and no later than the first quarter in 2020?

Response: I am a strong proponent of an all-of-the-above approach to closing the Digital Divide and facilitating faster deployment of broadband infrastructure, which includes the use of TV white space technology. While the FCC Chairman determines the timing of agency votes, I look forward to supporting FCC efforts that build on our work to open up TV white spaces.

The Honorable Robert E. Latta (R-OH)

1. As the author of the Precision Agriculture Connectivity Act that was included in last year's Farm Bill, I am interested in the economic benefit of GPS to the agriculture sector. Talking to farmers in my district, I know GPS can improve farm planning, field mapping, soil sampling, tractor guidance, crop scouting, variable rate applications, and yield mapping. All this innovation relies on connectivity, including that provided by GPS. How will the Commission continue to protect GPS services from harmful interference?

Response: I appreciated the chance to join you in Ohio last year and see firsthand the benefits that GPS brings to America's producers. In particular, we had the chance to visit a farm outside of Napoleon, Ohio, and hear directly from farmers about the economic opportunity and increased yields that GPS-powered Precision Ag can enable. I have heard the same stories in rural communities across the country. So while the FCC must always look for opportunities to open up spectrum bands for additional uses, we must also ensure that every FCC decision protects GPS from harmful interference.

The Honorable Adam Kinzinger (R-IL)

1. The Chairman announced just before the Thanksgiving break that the Commission will proceed with a public auction to repurpose 280 MHz of the C-Band. While there was a lot of debate about how the FCC was going to proceed on this band, there was one principle that seemed to be universal—these proceedings need to occur as quickly and efficiently as possible. I personally was open to either mechanism as long as we held to this principle of doing things quickly, plus one other principle—that substantial revenues be raised for the Treasury, hopefully for rural broadband deployment and similar programs.

   During the hearing, I asked Chairman Pai the following questions:

   Given that most stakeholders estimate a public auction will take longer than a private sale, what can Congress do to help speed up this public auction?

   Does the FCC need new authorities, or new appropriations to hire temporary staff or speed up the auction software procurement process?

   While the Chairman provided thoughtful answers in response, I ask that the Commission follow up with the Committee to offer any supplemental information or ideas in terms of new authorities or appropriations that would assist in expediting the C-Band Auction, including the process of preparing for the auction and perhaps the auction itself. Please be as detailed as reasonably possible.

Response: Last year, I laid out my priorities for the C-Band: that we clear around 300 MHz of spectrum for 5G; that we do so via a transparent process, and that we generate a return for the U.S. Treasury. I am glad that the approach laid out by Chairman Pai will achieve those goals. We must now continue our work to hold the auction in 2020. While the FCC has authority to conduct the auction, I would of course welcome and work to implement any legislation from Congress that expresses a view on how the FCC should conduct the auction or allocate auction revenues.

2. During the hearing, I asked Chairman Pai the following questions:

   Are there cybersecurity or physical security concerns if information and communications technology companies allow non-cleared or un-vetted personnel access to software development kits or application programing interfaces for 5G networks?

   Is there a common standard to use vetted personnel, AI, or machine learning to analyze source code that will be distributed or used in patches for software updates of 5G equipment?

While the Chairman provided thoughtful answers in response, I ask that the Commission follow up with the Committee to offer any supplemental information or ideas regarding the ways in which the Commission, using existing authorities, or Congress, by enacting new legislation, can bolster the physical security and cybersecurity of our 5G networks. Please be as detailed as reasonably possible, and if the Commission feels that these responses are best conveyed to the Committee in a confidential manner in order to protect our national security, please indicate as much to the Committee and we will work with you all to make appropriate arrangements.

Response: Guaranteeing the security of our next-generation networks is a top priority for me and the FCC. After all, these new networks will not just carry voice calls and emails. Some of our most sensitive information will travel over these platforms. That is why, in 2018, I called on the FCC to expand our efforts and put more options on the table, including the removal of potentially insecure equipment that carriers have already installed in their networks. If equipment poses a threat, it's not enough to stop subsidizing it: it must come out of the network. I am glad that my colleagues joined me in voting in favor of a proposal to do just that late last year. So the FCC will continue to eradicate the threat posed by insecure equipment in 5G and other next-gen networks.

The Honorable Tim Walberg (R-MI)

1. This Congress, I introduced H.R. 3255 the TOWER Act, this bipartisan legislation is aimed at helping close the skills gap in the telecommunications industry. It reflects the need for a highly-skilled, professional workforce to sustain the ever-expanding deployment of 5G. As a Ranking member on the Committee on Education and Labor this issue is even more important to me.

    a. Can you talk about the sheer scale of these jobs that will be available?

Response: America now leads the world in 5G. The private sector is building new cell sites and other infrastructure needed for 5G at an accelerated clip. And this work is creating significant demand for new jobs. Industry estimates that it could hire 20,000 tower climbers to meet this demand. These are good-paying, solidly middle class jobs. If you expand beyond just tower climbers to include the lineman and other construction crews that are also needed to support these 5G builds, I have heard industry estimates that suggest they could use 100,000 more skilled infrastructure workers.

    b. Are there ways where Congress can work together more with the FCC in helping secure the needed talent pipeline?

Response: Last year, I laid out a jobs initiative that looks to community colleges as pipelines for 5G jobs. In the matter of a few weeks or months, someone can learn the mix of classroom and practical skills needed to land a good paying job in the tower industry. I have been working with stakeholders to expand the number of community colleges that offer this type of program. I

believe Congress can help support and expand these and other avenues for creating 5G jobs, and I would welcome the chance to work with you and your team on those initiatives.

Full Committee Hearing
Senate Committee on Commerce, Science, and Transportation
Written Questions for the Record from Chairman John Thune for Brendan Carr

Question 1. Millions of rural Americans lack access to broadband, and bridging the digital divide is a priority for me and the Committee. As traditional fiber, cable, and 4G broadband is deployed throughout the country, policymakers must nevertheless be creative and open-minded when exploring all options to achieving universal service. What role do you see for unlicensed spectrum (Wi-Fi, TV White Spaces, millimeter wave, etc.) in connecting unserved rural households with broadband internet access?

Answer: I agree that policymakers must be creative and open-minded when it comes to achieving universal service. And I believe that unlicensed spectrum should continue to play an important role in connecting unserved rural households with broadband internet access. If confirmed, I would work to ensure that the FCC takes an all-of-the-above approach to spectrum, including by opening up and enabling the use of unlicensed spectrum.

Full Committee Hearing
Senate Committee on Commerce, Science, and Transportation
Written Questions for the Record from Senator Ted Cruz for Brendan Carr

Federal Spectrum

FCC Commissioner Michael O'Rielly stated in a 2015 blog post that, "By some accounts, the Federal government currently occupies- either exclusively or on a primary basis- between 60 and 70 percent of all spectrum in the commercially most valuable range between 225 megahertz and 3.7 gigahertz, which comes to approximately 2,417 megahertz."

> ***Question 1.*** What steps can this Committee take to incentive federal users, especially the Department of Defense, to make more spectrum available for commercial use? Should Congress consider allowing federal agencies to keep more of the proceeds from FCC incentive auctions?
>
> **Answer: There are a number of steps the Committee could take to incentivize federal users to make more spectrum available for commercial use, while also ensuring that those users can continue to carry out their important missions. I will highlight three steps here.**
>
> **First, the Committee could facilitate, or consider legislation that would require, the consolidation of various federal use cases. Federal radar systems may be one example. Federal users are known to operate separate systems pursuant to separate spectrum allocations that perform identical or similar functions. So it is worth exploring opportunities to consolidate those systems and spectrum allocations, which could create efficiencies, ensure that federal users can continue to carry out their missions, and free up additional spectrum for commercial use.**
>
> **Second, the Committee could convene stakeholder meetings to help identify candidate bands and map out the timeline and process for freeing those bands up for commercial use, while continuing to protect the interests of federal users.**
>
> **Third, the Committee could consider legislation that would require federal users to free up a certain amount of spectrum (or specific spectrum bands) by a date certain, while ensuring that adequate spectrum resources remain available to federal users to carry out their missions.**
>
> **With respect to the second part of the question, I defer to Congress' ultimate judgment on this issue, but I do believe that Congress should consider allowing federal agencies to keep some portion of the proceeds of an FCC auction of federal spectrum as a means of incentivizing incumbents to free up spectrum.**

On the flip side, a slightly different approach to incentivizing the relinquishment of underutilized federal spectrum would be the enactment of spectrum fees. Brent Skorup at the Mercatus Center has written that, "Some countries have applied spectrum fees to government users, which

generally attempt to approximate the opportunity cost of the spectrum so that users internalize the social value of the spectrum they occupy. If the opportunity cost fees are high, a user will be induced to use less spectrum to reduce its fees or leave the space completely and sell the cleared spectrum for higher-valued uses."

> ***Question 2.*** Should Congress implement a spectrum fee to incentive federal users to consider relinquishing underutilized spectrum?
>
> **Answer: While I defer to Congress' ultimate judgment on whether to implement spectrum fees, I believe that this type of incentive system certainly merits consideration.**

5G Wireless Technology Deployment

We are on the cusp of the wireless industry introducing the next generation of technology – 5G. That upgrade to our existing networks is expected to bring us higher data speeds, lower latency, and the ability to support breakthrough innovations in transportation, healthcare, energy and other sectors. And as recent studies have shown, 5G is expected to provide significant benefits to state and local governments, allowing them to become smart cities. However, those networks will also require many more antenna sites than we have today – they will increasingly rely on small cell technologies. To recognize these benefits, a study performed by Deloitte shows that several steps are necessary to remove impediments to antenna siting. Texas is leading the way, as evidenced by recent legislation (Texas Senate Bill 1004) signed into law just last month that streamlines the deployment of next-generation 5G networks. It's also my understanding that the Commission has initiated a proceeding designed to evaluate whether some of those obstacles can be removed.

> ***Question 3.*** Do you support the Commission's efforts in this area? Do you think that the Commission's proposals are achievable, particularly considering state and local government interests in this area?
>
> **Answer: As your question indicates, 5G is expected to support breakthrough innovations. In doing so, it can create jobs, spur investment, and grow the economy for the benefit of all Americans. 5G deployments may look very different than traditional 4G deployments, as your question notes, and this is due in part to the fact that 5G deployments should involve a significantly greater number of small cells.**
>
> **In April 2017, the FCC released a Notice of Proposed Rulemaking and Notice of Inquiry that seeks public comment on a number of ways that the FCC could help streamline the deployment of 5G and other wireless technologies. While I have an open mind about the FCC's proceeding, I support the Commission's effort to seek comment on these issues, and I believe that the agency can achieve results consistent with the long-standing and important role that state and local governments play in this area. Indeed, as your question notes, many state and local governments are adopting ordinances that are designed to promote 5G and small cell deployments.**

FCC Priorities

Question 4. My top priority is regulatory reform. Please identify three meaningful regulations that you are interested in repealing during your tenure at the FCC.

Answer: I agree with you on the importance and need for regulatory reform. If confirmed, I would work to repeal FCC regulations that are unnecessarily limiting innovation, investment, and deployment.

First, the FCC must take action to ensure that federal regulations are not needlessly deterring the deployment of wireless infrastructure, including infrastructure that can be used for 5G. In particular, the FCC has asked for public comment on whether it should eliminate federal rules that could be slowing down small cell deployments. I support that inquiry. If confirmed, I would welcome the opportunity to examine the record and eliminate any federal regulations that are only serving to slow the deployment of innovative and advanced wireless technologies.

Second, the FCC has opened a proceeding that aims to identify and eliminate rules that might be slowing the deployment of wireline infrastructure. In particular, the FCC's proceeding asks about eliminating requirements in Part 51 of the FCC's rules. Stakeholders have argued that these requirements are needlessly increasing the costs of deploying next-generation networks and slowing the roll out of new wireline services. If confirmed, I would welcome the opportunity to examine these requirements and eliminate any unnecessary ones.

Third, the FCC's Part 22 rules contain paperwork requirements that apply solely to one set of wireless licensees. Commenters have argued that these requirements impose burdensome and outdated regulations that are ripe for elimination. If confirmed, I would welcome the chance to examine the record and determine whether any such rules can be repealed.

ICANN

Question 5. Last year the previous administration allowed the Federal Government's contract with ICANN to expire. Do you think that was a wise and prudent decision?

Answer: No, I do not think it was a wise and prudent decision.

Question 6. Microsoft and Facebook and YouTube, which is owned by Google, all of whom supported President Obama's Internet transition, have signed a code of conduct with the European Union to remove so-called hate speech from European countries in less than 24 hours. Do you think these global technology companies have a good record

of protecting free speech? And what can be done to protect the First Amendment rights of American citizens?

<u>Answer</u>: The First Amendment operates to prevent the government from abridging the freedom of speech, and Supreme Court case law is clear that there is no exception for so-called hate speech. The First Amendment thus embodies the idea that we should respond with more speech—not less and certainly not government censorship—when confronted with disfavored speech that is protected by the Constitution. To the extent companies are cooperating with governmental bodies to censor disfavored speech under a claim of removing so-called hate speech, then that activity is not consistent with those First Amendment principles. To protect the First Amendment rights of American citizens, it is important that the government not engage in censoring protected speech. I am committed to upholding and protecting the First Amendment rights of all Americans.

Full Committee Hearing
Senate Committee on Commerce, Science, and Transportation
Written Questions for the Record from Senator Dan Sullivan for Brendan Carr

I want to thank you and the current FCC Commissioners for working with my staff to help alleviate some of the burden that the reduction in reimbursement from the Rural Health Care program placed on Alaskan health care providers.

In my state, the price of telecommunications services is so expensive that many rural health care providers cannot afford them without support from the Rural Health Care program. Telemedicine services in Alaska are essential for many of our villages, and they are only possible if a health facility has connectivity.

In enacting the Telecommunications Act of 1996, Congress specifically directed the FCC to ensure that rural health care providers have access to telecommunications services at rates that are reasonably comparable to those for similar services in urban areas of the State. As you are aware, for the first time the demand for funding from the Rural Health Care program exceeded the $400 million cap.

Question 1. Will you work to ensure the sustainability of the Rural Health Care Program as the FCC moves forward to review further reforms to universal service programs?

Answer: As your question indicates, the Rural Health Care program serves important purposes, particularly in Alaska where the state's size, remote areas, and varied terrain can translate into high costs of service, including for healthcare-related communications services. The Rural Health Care program helps reduce the cost of those services. If confirmed, I would look forward to working with my colleagues to ensure the sustainability of the Rural Health Care program.

Question 2. If confirmed, what steps would you take to address this funding issue?

Answer: If confirmed, I would look forward to working with all stakeholders to help ensure the Rural Health Care program continues to perform its important purposes. I can assure you that I would approach the issue of funding with an open mind.

Question 3. Will you consider beginning a rulemaking proceeding to evaluate the changes necessary to ensure that the program budget is sufficient to fulfill the purposes of the program?

Answer: If confirmed to serve as a Commissioner, I would not set the agenda at the agency—meaning, I would not have the authority to begin a rulemaking proceeding by circulating a Notice of Proposed Rulemaking. Only the FCC's Chairman can circulate items for the Commission's consideration. However, if confirmed, I would welcome the opportunity to work with my colleagues to ensure that the program's budget is sufficient to fulfill the purposes it serves.

Mr. Carr, you seem to have extensive knowledge of the FCC and an idea of what you hope to focus on if confirmed. I agree with you that the technology and communications space will significantly help grow the economy, and working to grow the economy is an issue I am very focused on in Congress.

In Alaska, many places do not have any connectivity, and those same places many times are not connected by road. It is costly to deploy telecommunications infrastructure, and while these communities are extremely innovative, a lack of connectivity is a hindrance in growing their businesses and increasing their economic activity.

The carriers in my state are doing great work to bring telecommunications to communities that don't have it, as well has to upgrade existing networks to increase speeds to their urban counterparts. Much of this is due to the great dialogue that has occurred between the FCC, Alaskan carriers, and our Alaska delegation.

> ***Question 4.*** Will you work with my office to continue exploring ways to improve broadband access in Alaska?
>
> **Answer: Yes, I would welcome the chance to work with your office on ways to improve broadband access in Alaska.**

It is my understanding that environmental assessments (EAs), when required under the FCC's rules, are currently not subject to any processing timelines or dispute resolution procedures. As a result, environmental assessments for new facilities can languish for an extended period of time—sometimes years. This is an unfortunate barrier to feeding our nation's hunger for expanded wireless broadband.

Given my seat on this committee and on EPW, I have a particular interest in finding ways to streamline these procedures.

> ***Question 5.*** Will you commit to finding ways to streamline the FCC's review of environmental assessments, including through the adoption of "shot clocks" to resolve environmental delays and disputes, in addition to working on additional infrastructure reforms?
>
> **Answer: Yes, I am committed to identifying ways to streamline these procedures and working on additional infrastructure reforms. I would welcome the chance to work with your office on these issues.**

Full Committee Hearing
Senate Committee on Commerce, Science, and Transportation
Written Questions for the Record from Senator Mike Lee for Brendan Carr

Question 1. My understanding is that as of today almost 200 carriers still receive over $500 million annually in USF funds under the legacy high-cost support program in order to provide voice service in areas where multiple wireless carriers already offer mobile voice and broadband services without USF funding. Of this $500 million, what percentage actually goes to an area where the USF funding recipient is the only wireless provider in that area?

Answer: In 2011, the FCC established an annual budget for Mobility Fund Phase II (MF-II) of up to $500 million for ongoing support for mobile services, with up to $100 million reserved for support to Tribal lands. In the MF-II Order the FCC released in March 2017, the FCC stated that "a conservative estimate is that three-quarters of support currently distributed to mobile providers is being directed to areas where it is not needed. In other words, carriers are receiving approximately $300 million or more each year in subsidies to provide service even though such subsidies are unnecessary and may deter investment by unsubsidized competitors from increasing competition in those areas."

Response to Written Questions Submitted by Hon.
John Thune
Written Questions for the Record to
Commissioner Carr

Question 1. Please describe actions the FCC has taken to meet its statutory obligations in regards to the T-band.

Response: Mr. Chairman, thank you for the question and for your leadership on public safety issues. It is my understanding that the FCC has taken a number of actions in recent years to meet its statutory obligations pursuant to the Spectrum Act relating to the T-Band. Those actions are as follows:

- In April 2012, the FCC issued a Public Notice that froze the processing of applications for new or expanded T-Band operations. That same month, the FCC adopted an Order that waived the January 2013 deadline for the migration of T-Band licensees to narrowband technologies, due to the need for future relocation.
- In February 2013, the FCC issued a Public Notice to obtain additional information to help inform future decisions regarding the T-Band.
- In October 2014, the FCC adopted an Order opening up the 700 MHz narrowband reserve channels (24 reserve channel pairs) for general licensing and gave T-Band public safety licensees priority access to those channels.
- Finally, in February 2015, the FCC issued a Notice of Proposed Rulemaking regarding the 800 MHz band that proposed to give T-Band incumbents priority access to interstitial channels.

Response to Written Questions Submitted by Hon.
Roger Wicker
Written Questions for the Record to
Commissioner Carr

Question 1. Commissioner Carr, this month Mississippi celebrated the groundbreaking of a new Center for Emergency Services on the University of Mississippi Medical Center's campus in Jackson. This center will enhance our disaster response by helping emergency medical personnel and first responders deliver faster, quality care to those in need. This center will support the deployment of the Mississippi Tele-Assist System, which involves deploying emergency vehicles with the ability to transmit life-saving images using internet connectivity. In your view, how can we leverage existing services, such as those that will be provided through the new Mississippi Center for Emergency Services, to maximize the impact and effectiveness of the Connected Care Pilot Program, particularly for our first responders and emergency medical personnel?

Response: Senator, thank you for the question and for your leadership on telehealth issues. The idea for the Connected Care Pilot Program stemmed from my initial visit with you in Jackson and the time I spent at the University of Mississippi Medical Center learning about their advanced telehealth technologies.

As part of the Notice initiating the Connected Care Pilot Program, the Commission seeks comment on whether and how the pilot program could fund connectivity for emergency medical service facilities, such as ambulances, recognizing that EMS-based telehealth may help triage patients more quickly and lead to cost savings for local governments. I would welcome the chance to learn more about the Mississippi Tele-Assist System and how emergency services might be leveraged as part of the Connected Care Pilot Program.

Question 2. Commissioner Carr, will the FCC consider using the Connected Care Pilot Program to help meet the needs of rural emergency responders in improving their care delivery and coordination to special needs populations, like children?

Response: Yes. I think this is an important way that the Pilot Program could help bridge the health care digital divide.

Question 3. Commissioner Carr, in rural areas patients often lack access to primary care facilities. In many instances, local schools (and homes) serve as a site of health care service in these areas. Will the FCC consider permitting schools to be "sites of service" in telehealth programs supported by the Connected Care Pilot Program?

Response: Senator, you raise a good point. I will plan to look into this idea further, consistent with the Commission's statutory authority to provide connectivity to such sites.

Question 4. Commissioner Carr, will the FCC consider using the Connected Care Pilot Program to support tele-mental health care delivery to rural areas and other underserved communities?

Response: Yes. I believe this is an important health care application where remote connectivity can be especially helpful, particularly in rural areas and for veteran populations.

Response to Written Questions Submitted by Hon.
Jerry Moran
Written Questions for the Record to
Commissioner Carr

Question 1. According to studies, the deployment of 5G wireless technology is expected to contribute $275 billion in new investment, $500 billion in economic growth, and up to 3 million new jobs to the U.S economy. These projected benefits highlight why the U.S. needs to keep pace and surpass our foreign competitors like China and South Korea. While I have supported legislation like the RAPID Act and the MOBILE NOW Act to streamline overly-cumbersome siting requirements and regulations, what else should be done to increase U.S. competitiveness in 5G deployment while appropriately maintaining local and state authority over larger macro-tower siting?

Response: Senator, thank you for the question and for your leadership on these issues. As I envision it we must focus on two things to keep pace and surpass our foreign competitors in the race to 5G: spectrum and infrastructure. On the spectrum side, we became the first country in the world to allocate high-band spectrum for 5G, and we're now opening even more 5G bands. At the FCC, we have already assigned more high-band spectrum for 5G than any country in the world—we're more than four gigahertz ahead of second-place China. Additionally, we are looking to free up more low-, mid-, and high-band spectrum. We need to keep this up.

On the infrastructure side, we must continue to remove barriers to infrastructure deployment to ensure our regulatory structures are 5G Ready. Your efforts on the RAPID Act are very helpful in this regard. The FCC has been taking steps, as well, to push the regulatory costs out of the system and encourage more deployment. In March, for instance, we adopted an order that exempts small cells from certain federal historical and environmental review procedures that were designed for those large, hundred-foot towers. This decision extended the same regulatory treatment to small cells that the Commission has always applied to the deployment of other types of infrastructure, including Wi-Fi routers and consumer signal boosters. This one step is expected to cut about 30% of the total cost of deploying small cells. In fact, an Accenture study determined that our action could save $1.56 billion, which could be used to deploy 55,000 new cell sites and create more than 17,000 jobs. Additionally, the FCC is scheduled to vote at its September 26 Open Meeting on a 5G order that is expected to pave the way for small cell deployment, including by saving $2 billion in unnecessary fees and creating more than 27,000 new jobs.

Response to Written Questions Submitted by Hon.
Shelley Moore Capito
Written Questions for the Record to
Commissioner Carr

Question 1. In many rural communities, students have long commutes on school buses sometimes upwards of half an hour, an hour, or even longer one-way. Given the connectivity challenges many students face in rural communities, how could E-rate help connect school buses with wifi to allow students to use commute time to do homework, projects, or other school work?

Response: Senator, thank you for the question and for your leadership on these issues. I agree with you that we should continue looking for ways to close the digital divide. There may be a range of solutions to help do that, as you suggest. I would be happy to work with you and your staff to think about additional policies we can implement to help ensure connectivity for students around the country.

Written Questions Submitted by the Honorable Dan Sullivan to the Honorable Brendan Carr

Question 1. As you know, we have highly consequential, outstanding items before the Commission. Please provide a status update on the following petition: Maniilaq Association's appeal of USAC's denial of FY2017 FRNs.

Response: The Commission has granted the waiver sought by Maniilaq Association, and directed USAC to reinstate the funding commitments within 60 days, and discontinue its recovery actions against Maniilaq. The final order can be found here: https://docs.fcc.gov/public/attachments/DA-20-173A1.pdf

Question 2. A popular band of spectrum, the C-band, is being prepped to be made available to wireless carriers. Alaska's C-band is critical for telemedicine and other important programs. In a response to a letter the Alaska delegation sent last year regarding C-band incumbents in Alaska, the FCC responded that one of the 4 principles for reallocation of this band is "protecting services that are currently delivered." As the FCC begins to reallocate critical C-band spectrum, what considerations are you giving to incumbent users who it may be impossible or impractical to relocate?

Response: In Unalaska, I had the chance to see firsthand the important role that C-Band spectrum plays in connecting rural and remote parts of Alaska. While there, I visited the one health care clinic on the island, and it depends on C-Band to offer telehealth services. The draft decision that the FCC is scheduled to vote on at our February meeting excludes areas outside of the contiguous United States from the proposed license modifications.

Senate Committee on Commerce
"5G Workforce and Obstacles to Broadband Deployment"
Wednesday, January 22, 2020
Senator Kyrsten Sinema

Questions for Federal Communications Commission Commissioner Brendan Carr

As you know, Educational Broadband Services (EBS) resides in the mid-band spectrum, in the 2.5GHz band and has helped foster programs that tackle the homework gap and digital divide by providing spectrum for broadband services. In Arizona, the Havasupai Tribe uses EBS channels for wireless routers for their members to take online classes. Last year, the Tribe was granted four new EBS channels that they intend to use for telemedicine.

- Last year, the FCC finalized a rule to update the framework for licensing EBS spectrum in the 2.5 GHz band. The final rule included priority filing windows for Tribes to apply for 2.5GHz licenses before issuing licenses for any remaining spectrum through auction.
    - First, I want to again thank the Commission for establishing a Tribal Priority window for new EBS license issuance for Tribal National in the final rule. This decision provides Tribes with the opportunity to expand rural broadband, accelerate 5G deployment, close the digital divide, and bridge the homework gap.
    - How will the FCC work to help recipients of these licenses meet buildout requirements?

Response: I agree that the Rural Tribal Priority Window is a significant opportunity to improve broadband service offerings and to close the digital divide on Tribal lands. I recently spent time with Tribal leaders on the Mescalero Apache Reservation, and they conveyed their interest in the 2.5 GHz spectrum and appreciation for the expanded Priority Window. The FCC is committed to assisting Tribes through this process, including through a number of engagements lead by FCC Commissioners in the Office of Native Affairs and Policy. For example, the Commission's website contains detailed information on the Tribal window (https://www.fcc.gov/25-ghz-rural-tribal-window), including links to workshops, presentations, tutorials, and staff contact information.

    - Has the FCC considered opening priority windows for tribal communities in other future license auctions?

Response: This is the first time that I am aware of the FCC opening a priority window for Tribes. I am open to considering additional windows where doing so will further the public interest.

SENATE COMMERCE COMMITTEE
5G WORKFORCE AND
January 22, 2020
Senator Udall

Questions to Commissioner Carr, Federal Communications Commission
QUESTION 1: Commissioner Carr, thank you for your recent visit to New Mexico and to the Mescalero Apache Reservation. As you saw firsthand, New Mexico is a beautiful state to live in – but we have many challenges to access high-speed broadband.

My friends at Mescalero Apache Telecom have done excellent work serving their customers with the infrastructure challenges they face – but you saw for yourself the significant hurdle facing school children's access to adequate broadband in that area.

In 2018, Senator Cantwell, Representative Lujan, and I wrote to the Bureau of Indian Education requesting that it work with schools and, where possible, allow BIE schools to use a local broadband connection that may be more affordable and faster.

BIE refused this request with a flurry of excuses.

Mr. Chairman, I ask unanimous consent to include a copy of the letter and response in the record.

Commissioner – we all know that children in BIE schools are at an extreme disadvantage when it comes to high-speed broadband. Additionally, as the BIE cited in its response to me – 90 percent of the cost of broadband for BIE schools comes from the E-Rate program. So BIE's decision not only hinders access to higher speeds, it also puts a burden on the extremely important E-Rate program. Will you commit to work with me to help our Native students gain access to high-speed broadband, including advocating to allow BIE schools to use a local broadband connection if more affordable and faster?

Response: I greatly appreciated the chance to see firsthand the challenges that come with expanding Internet connectivity across rural New Mexico and remote stretches of the Mescalero Apache Reservation. On that visit, I had the chance to meet with students at the Mescalero Apache School and learn how they are leveraging Internet connections to expand opportunities, including in STEM. I am not familiar with the nuances of the BIE program or regulations, but I would welcome the chance to work with you on any ideas that would enable better and more affordable broadband connections at BIE schools.

Answers to Additional Questions for the Record by Michael O'Rielly, FCC Commissioner

The Honorable Gus M. Bilirakis

1. **During my in-person questioning, I asked Chairman Pai about the FCC field office closures that took place in early January. Due to your longstanding interest in combatting pirate radio in a timely and effective manner, do you believe that these closures have resulted in (or will result in) increased actions against pirate radio operators?**

   While I expressed serious reservations regarding the closure of FCC field offices when enacted by the previous Commission, it is unlikely that this action will have a negative effect on the Commission's ability to combat pirate radio stations. The problem with the previous Commission's approach to pirate radio was a lack of commitment to enforcing the law and eliminating these illegal operations, not the lack of equipment, personnel, or offices. In particular, I was told by numerous individuals involved in the broadcasting industry that the previous Chairman's leadership team had set pirate radio enforcement as a low priority. No amount of resources could overcome that misguided approach.

   Thankfully, Chairman Pai has a much different view and enforcement of the law against those involved in pirate radio has increased substantially. The new Commission is committed to eliminating pirate radio "stations" and preventing such stations from developing in the future. Accordingly, I believe the FCC personnel, including in our Miami field office who I recently visited, are capable and committed to preventing pirate radio broadcasting from occurring anywhere within their oversight area.

   a. **Additionally, can you expand upon your written testimony regarding the repetitive warning process in place for pirate radio operators and the penalty restrictions the FCC faces in this area?**

      Under longstanding Commission practices implementing current law, the Commission gives notice to those individuals who are not Commission station licensees and who may be in violation of Commission rules (e.g., pirate radio broadcasters) prior to actually issuing a Notice of Apparent Liability for such violations. Equally problematic, the statute limits the amount the Commission can fine those participating in pirate radio broadcasting to rather trivial amounts compared to other violations. For instance, individuals recently found guilty of pirate broadcasting within the AM, FM or TV bands have faced fines in the *thousands* of dollars. However, those recently found in violation of the law or Commission rules for slamming or illegal robocalling have faced fines in the hundreds of *millions.* Together, these limitations have emboldened pirate broadcasters, who know the Commission, no matter how committed, can only do so much to aggressively fight pirate broadcasting. Respectfully, I recommend that Congress review and amend the law to modify these specific provisions in the narrow case of pirate broadcasting. I would be more than pleased to provide any assistance, if needed, to you or other Committee Members for this purpose.

Subcommittee Ranking Member Michael F. Doyle

1. **Do you believe that the Commission can unilaterally raise National Television Ownership cap?**

   No, based on my personal experience when the national cap was last altered, I believe only Congress can change the cap via passage of legislation. My views are similar with regards to the UHF discount. My recollection is that it was the expressed wishes of Congress that the UHF discount could not be altered without a change in the national ownership cap, thus also requiring a change in law. Hopefully, this helps explain my vote earlier this year to reverse the last Commission's effort to eliminate the UHF discount, thereby undoing a change not permitted by the statute. Substantively, I do not agree with maintaining either the UHF discount or such a low national ownership cap, if one is to exist at all, but that is a matter for Congress to decide or affirmatively delegate to the Commission.

   Others who were integrally involved with the last Congressional process argue that the statute only prohibits the Commission from modifying the national cap as part of a quadrennial review, pursuant to section 202(h) of the Telecommunications Act of 1996. While I don't agree with this reading of the law or how counterintuitive it would be in practice, such a view is not specifically prohibited and, with respect, the law could have been more clearly crafted. Accordingly, I have taken the position that this entire issue may need to be litigated out through the judicial process to determine which position is accurate, and I will support whatever action is necessary to see that the issue gets its day in court. I suspect my position will ultimately prevail at the end of the day, but I have been wrong before prognosticating court outcomes.

The Honorable Yvette Clarke

1. **Unlicensed spectrum – for uses like Wi-Fi – provides incredible value to the economy. By one estimate, that value will reach $547 billion this year, provided that sufficient unlicensed spectrum is made available. But a February 2017 study by Quotient Associates forecasts a Wi-Fi spectrum shortfall in the United States of between 788 MHz and 1.6 GHz by 2025, and predicts a particular need for more contiguous Wi-Fi spectrum to support 160 MHz "Gigabit Wi-Fi" channels.**

   a. **What can the FCC do to maintain U.S. leadership in Wi-Fi technology and ensure that sufficient unlicensed spectrum is made available to support ubiquitous access to Gigabit Wi-Fi among American consumers?**

      As other people have stated more eloquently, the beauty of unlicensed spectrum is we have no idea what it will be used for in the future but we are likely to be surprised at the innovation and ingenuity when it occurs. I agree that it is paramount to have sufficient spectrum available for unlicensed purposes, such as Wi-Fi, especially given the numerous studies indicating a potential shortfall in the coming years and the already congested state of existing bands today.

      To address the expected spectrum need and importance of unlicensed, I believe that the Commission should take a two-fold approach. Primarily, the Commission should examine and authorize unlicensed operations in bands where sufficient spectrum is not available through clearing or other mechanisms to make auctioned licenses

attractive and where harmful interference will not be caused to the primary licensees. High on this priority list must be 5.9 GHz. The Commission is currently conducting lab tests to determine whether, and if so how, unlicensed operations can occur in this band previously allocated for automobile safety services. Given its proximity to other unlicensed bands, this particular band would provide vast opportunities to offer wide channels, thus faster speeds and greater capacity than exists today.

At the same time, the Commission must reallocate additional bands for unlicensed operations. I appreciate that the Commission is actively exploring the best methods and bands to do so. For instance, the Commission's Spectrum Frontiers proceeding from last year allocated spectrum between 64 and 71 GHz for unlicensed services. The item also included a Notice of Proposed Rulemaking to consider whether to allocate additional spectrum in the 70 and 80 GHz bands for additional unlicensed use. Chairman Pai, with my wholehearted support, has indicated that the Commission will take action on that NPRM later this year.

Additionally, the Commission needs to free mid-band spectrum for unlicensed operations. It's one of the reasons I have advocated that the Commission seize upon an ad hoc industry proposal to reallocate the 3.7 to 4.2 GHz for licensed services and the 6 GHz band for unlicensed services. For the licensed portion, this action is necessary as US wireless carriers need mid-band spectrum to compete internationally in the global race to offer "5G" services. Similarly, reallocating 6 GHz for unlicensed purposes, while protecting incumbents or using market mechanisms to facilitate their exit, would complement the already existing unlicensed operations in the 5 GHz band.

Additional Questions for the Record to FCC Commissioner Michael O'Rielly

Subcommittee Chairman Marsha Blackburn

1. **In your testimony you cited the importance of provisions in the Subcommittee's recently passed FCC reauthorization bill that would authorize the Commission place deposits from bidders in spectrum auctions to be sent to the Treasury. Specifically, you testified this measure is "critical" because without it "the Commission currently has no way to comply with the law – and no way to move forward with any large spectrum auction."**

   Can you elaborate for the record on the legal and administrative impossibility of moving forward with auctions without a change in the law to allow the Commission to deposit bidder payments directly with the U.S. Treasury?

   The unwillingness of financial institutions, including the U.S. Federal Reserve Bank of New York, to accept and hold bidder deposits is a severe problem and I am aware of no legal or administrative options to conduct a spectrum auction without addressing this statutory quirk, as the Commission does not have the authority to supersede the law — even for good cause. This means that no auctions will be held until the law is changed via legislative efforts, including those already before the Subcommittee, such as the "Spectrum Auction Deposit Act" introduced by Representatives Guthrie and Matsui. Congress should expect that no spectrum auction revenues, beyond those that have already been collected, will be forthcoming in the meantime.

2. **The Subcommittee notes recent changes in the proceeding regarding the Citizens Broadband Radio Service (GN Docket No. 12-354). It appears these changes may increase the value of the spectrum to potential bidders.**

   Without legislation authorizing the Commission to place auction bidder deposits directly with the Treasury, can you estimate how much the federal government loses for deficit reduction?

   While the Commission is still in the process of seeking comments in response to its recent 3.5 GHz Notice of Proposed Rulemaking (NPRM), it is not unreasonable to assume that a number of proposals made in that document will make it into our final rules. These changes — such as longer licensee terms, license renewal expectancy, auction modifications, and larger geographical license areas — should enhance the value of the band when eventually set for auction. These changes and others will provide prospective auction participants the needed certainty that their investments won't be stranded and would make this important mid-band spectrum attractive for larger 5G wireless mobile and fixed deployments, thus increasing the overall auction interest and the number of potential bidders. Quantifying any added auction value may be difficult at the time, but it should be in the multiple billions of additional auction receipts.

   If the Commission continues to be precluded from holding this auction because of the bidder deposits issue, the Federal government could lose a good percentage of this revenue permanently as potential bidders find other uses for their funds, including purchasing

spectrum licenses on the secondary market. Moreover, delaying this auction could disrupt future auctions for complementary bands the Commission is exploring for commercial use, such as 3.1- 3.55 and 3.7- 4.2 GHz or even the millimeter waves above 24 GHz, causing additional revenue losses.

The Honorable Brett Guthrie

1. **I understand that NHTSA has an open rulemaking on the matter of V2V communications and is coordinating with the Commission on whether or how to share the spectrum currently allocated to Intelligent Transportation Systems (ITS) in the 5.9 GHz band. Are you willing to commit to working with NHTSA and other stakeholders on this issue to ensure the band remains available for ITS use in the future, and free from in-band or out-of-band emissions from other potential users?**

   As you know, the Commission in 1999 allocated the 75 MHz between 5.850 and 5.925 for Digital Short Range Communications (DSRC). While the vision of what DSRC might offer in terms of safety generally seemed meritorious, the pace of technology development has been quite dreadful. During this same time period, a variety of technologies have been developed and deployed in other spectrum bands that replicate uses once envisioned by DSRC. In addition, advances in autonomous vehicles have further called into question the efficacy of DSRC. For these reasons and others, I believe that the Commission should reevaluate whether DSRC will ever be widely deployed and adopted both in automobiles and infrastructure, which are necessities if it is to provide increased overall vehicle safety. If not, the Commission will have to consider whether this highly prized spectrum should be reallocated — not just opened for sharing — for other valuable purposes, including additional unlicensed services. Given these circumstances, it would seem inappropriate to commit at this time to permanently reserving spectrum for DSRC. Moreover, it would be premature to determine that, if DSRC is not continued, the 5.9 GHz band should lay dormant awaiting some unidentified and undefined other ITS safety technology.

2. **There are critical infrastructure industries like electric utilities whose wireless needs are absolutely paramount when it comes to reliability and freedom from interference, as drastic consequences can follow when their networks are disrupted by outside users. Are you willing to work with utilities on how best to harden their networks, and is there anything you can share on work you've already been doing to meet their wireless reliability needs?**

   All spectrum license holders, including electric utilities, deserve protection from harmful interference as provided for under Commission rules, including vigorous Commission investigations and enforcement actions against any party found in violation of our rules. This is one reason I have spent so much time on the issue of pirate radio "broadcasting" and its impact on licensed AM and FM radio stations. In terms of electric utilities, I would be happy to explore ways to ensure their spectrum license rights are appropriately protected. As part of this, I would want to make sure that we consider technology advances, which are narrowing protections once deemed necessary.

The Honorable Yvette Clarke

1. **Commissioner O'Rielly, at the Subcommittee's October 25th FCC Oversight hearing, you seemed to testify that rolling back the FCC's Local TV Ownership**

Rules would increase the number of diversely-owned TV stations. I would like to clarify your answers.

As I testified at the Subcommittee's October 25th FCC Oversight hearing, the number of women and African-American owned and controlled TV stations in the United States is abysmally low. In fact, according to the Commission's most recent report on the ownership of commercial broadcast stations, women collectively or individually held a majority of the voting interests in 102 full power commercial TV stations, or 7.4 percent. African Americans fared even worse, holding collectively or individually a majority of the voting interest in 12 full power commercial television stations, or 0.9 percent.[1] It is important to note, however, that this ownership situation resulted under the FCC's archaic media ownership rules, which we took a major step to modernize in November. I believe that updating our rules to reflect the actual marketplace will allow broadcasters to better compete and potentially thrive in the increasingly dynamic marketplace. Congress shared this sentiment when it passed the Telecommunications Act of 1996, which included Section 202(h) that required the Commission to review its rules on broadcast ownership every four years in order to "determine whether any of such rules are necessary in the public interest as the result of competition" and to "repeal or modify any regulation it determines to be no longer in the public interest."[2] As I stated at the hearing, the current rules have not worked to promote diversity in media ownership. We ought to try something new.

a. Do you believe that the Chairman's deregulatory order (FCC-CIRC l 711-06)-as opposed to any new smaller projects you are proposing-will increase the number of women owned and controlled TV stations and the number of African-American owned and controlled TV stations? Please answer yes or no, and then provide a brief explanation.

Yes. I believe that modernizing the FCC's media ownership rules, as well as eliminating burdensome administrative requirements imposed on both broadcasters and cable operators, will benefit the entire media ecosystem, including diversely-owned and controlled TV stations. These reforms vary from eliminating cross-ownership bans and the "eight voices test" to various rulemakings seeking to dispose of forms regulatees must file at the Commission that do not serve the public interest (or any particularly purpose) and interpreting "written notice" to include electronic notice. One rule we hope to eliminate actually requires broadcasters and cable operators to maintain paper copies of FCC rules. It boggles the mind to think that this requirement is still being imposed on relevant parties. Importantly, the costs imposed by government red tape adversely affect small businesses, which are more likely to be diversely-owned.

b. If your deregulations do not result in those increases within six months of when they go into effect, will you commit to reversing these deregulatory policies at that time?

No. Under the Commission's prior regulations, the number of diversely-owned and

[1] FCC, Media Bureau, Third FCC Form 323 Report on Ownership of Commercial Broadcast Stations as of October 1, 2015 (2017), *available at* https://apps.fcc.gov/edocs_public/attachmatch/DOC-344821A1.pdf.

[2] Telecommunications Act of 1996, Pub. L. No. 104-104, § 202(h), 110 Stat. 56, 111-12 (1996).

controlled TV stations did not meaningfully increase. This includes rules like the Newspaper-Broadcast Cross Ownership Rule that has been in place since the 1970s. After more than four decades of rules that did not work to promote localism, competition, or viewpoint diversity, I believe we should give a deregulatory approach a sufficient chance.

Additional Questions for the Record to Commissioner Michael O'Rielly

The Honorable Brett Guthrie

1. When it comes to describing the Commission's work within global fora such as the ITU or others, what role do you believe the Commission should play as an influential voice on spectrum policy and connectivity? This could be in relation to other U.S. agencies and foreign policy makers or relative to domestic and foreign stakeholders.

Globally, the Commission has a vital role to play on spectrum policy and connectivity. I was fortunate to have attended the last ITU Plenipotentiary Conference in Busan, WRC-15 in Geneva and more recently the CITEL PCC.II meeting in Orlando, along with other international events. These conferences and ministerial meetings have driven home the importance of our nation and subsequently our region having a united front and strategy when it comes to spectrum policy generally and, specifically, as we approach international conferences, such as the next ITU Plenipotentiary Conference and WRC-19. My firsthand observations from these conferences solidified, in my mind, how difficult it can be to arrive at consensus decisions, especially when it comes to spectrum and the protectionist approach advocated by some nations. I also fully appreciate the need to start communications with other countries as early as possible so that we are effective in executing on our main priorities.

As far as the U.S. perspective, our priorities are generally aligned with creating a regulatory environment that provides our telecommunications industries the opportunity to innovate, obtain investment, and ensure continued growth for years to come. In part, that means reallocating underutilized spectrum bands globally for new wireless services. We also seek to promote the interests of our citizens, especially those who are unserved and in need of modern and robust connectivity in order to participate in the new digital economy. I recently penned an op-ed on needed changes to the structure and operations of the ITU. In the end, the United States must pursue the best course of action to meet its own spectrum needs. While I am hopeful that the ITU will be part of that process, there is much work ahead before that is a surety.

The Honorable Pete Olson

1. As you are well aware, many telecom companies are looking to rollout 5G as a fixed wireless broadband service, which will compete directly with DSL, Cable, Satellite and Fiber. Can you please elaborate on what the addition of "Wireless Fiber" to the broadband marketplace means for the increasingly competitive marketplace?

As you note, many people refer to 5G as "Wireless Fiber" because it has the potential to offer consumers enormous increases in capacity, much faster speeds, and a significant reduction in latency to meet the demands of a broad range of applications, some of which are not even thought of today. To put this in perspective, the FCC's latest Mobile Competition Report highlights industry developments from 4G LTE: data usage has soared to 13.7 trillion MB, a 42 percent increase from the prior year and a whopping 238 percent increase from just two years ago. On an individual basis, monthly consumer data use is up 39 percent since 2015 and over 50 percent of the American public has gone completely

wireless. But, I see this as just the beginning. Every day more and more consumers are flocking to wireless broadband and the mobile experience it provides despite the differences in speed. In other words, consumers, especially in the less affluent and younger populations, are willing to trade speed for flexibility. This is not too dissimilar to how consumers were willing in the early 2000s to trade wireline voice call quality for inferior wireless voice service that offered mobility. With wireless fiber, those speed differences will be even harder to distinguish, and it will be nearly impossible for the Commission to ignore the exciting benefits and new competitive marketplace options made possible in a 5G universe.

The Honorable Susan W. Brooks

1. We need a balanced approach to spectrum policy, one that takes into account both big and small providers, urban and rural. I am particularly concerned about On-Ramp Indiana, Inc. (along with their customers such as Beck's Hybrids and their farm server customers), a constituent of mine that has been deploying rural broadband using CBRS spectrum in my district. They need to have a fair shot to compete in this upcoming auction, and have asked for just a couple of small license areas. Would you commit to working to find a balanced approach so that rural broadband providers like On-Ramp Indiana, Inc. can compete in the upcoming auction?

For over a year, I have been working with a vast array of stakeholders interested in CBRS spectrum to ensure that it is attractive to as many users and use cases as possible. Debate over the geographic license size has been the most contentious change contemplated from the past rules. Based on countless conversations and compromises, I have formulated recommendations on a way to modify our existing rules for PAL licenses and hope that this will be ready to be considered at an Open Meeting soon. I can commit to you that I believe the approach I have recommended to the Chairman is balanced and addresses all legitimate concerns raised throughout our process. Once the proposal is made public, I would be happy to brief you on it and answer any questions you may have on the potential impact to your state. No one is likely going to be entirely pleased with this outcome, but I believe it achieves a sound and just result.

Attachment—Additional Questions for the Record

Subcommittee on Communications and Technology
Hearing on
"Accountability and Oversight of the Federal Communications Commission"
May 15, 2019

The Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

The Honorable Anna G. Eshoo (D-CA)

1. During the worst fire in California's history, Verizon throttled the data speeds of Santa Clara County firefighters, hindering their ability to communicate.

    a. If the 2015 Open Internet Order wasn't repealed, could this practice have been considered a violation of the ban on "unjust and unreasonable" business practices?

Response: The 2015 Title II Order's no-throttling rule prohibited impairment or degradation of lawful Internet traffic based on *content*—not *data usage*. Since the example cited involved the latter and not the former type of impairment, the anti-throttling rule would not have been applicable. As for being a potential violation under the ban on "unreasonable interference or unreasonable disadvantage" for Internet conduct, it is practically impossible to know the answer; that standard was extremely vague and open-ended and gave the Commission's Enforcement Bureau wide interpretive discretion. In contrast, the Commission's 2017 Restoring Internet Freedom Order rightfully reinstated the Federal Trade Commission's jurisdiction over Internet service providers, thus closing a significant gap in consumer protection created by the flawed 2015 Order.

    b. Has the FCC taken any actions to avoid a repeat of this issue in California and other parts of the country by Verizon or other ISPs?

Response: Thanks to the FCC's decision in the Restoring Internet Freedom Order to reinstate the FTC's historical enforcement authority and expertise over competition and consumer protection in the Internet ecosystem, consumers are protected from anticompetitive, unfair, and deceptive practices.

2. Under the 2015 Open Internet Order, the FCC could investigate possible violations of bright-line prohibitions of net neutrality and other "unjust and unreasonable practices."

a. Since the 2017 Restoring Internet Freedom Order, has the FCC been investigating whether ISPs are engaging in blocking, throttling, or paid prioritization practices, both as disclosed by ISPs and undisclosed practices?

Response: Investigations related to ISP transparency requirements are handled by the FCC's Enforcement Bureau; therefore, I must defer to the Commission's Enforcement Bureau on this question.

b. If not, would the FCC even know if "Over the past year, the Internet has remained free and open," as Chairman Pai stated on January 2, 2019?

Response: Consumers and advocates who scrutinize every action of ISPs have not produced demonstrable evidence of consumer or network harm in the aftermath of the Restoring Internet Freedom Order. The free and open Internet flourished prior to the introduction of net neutrality rules, and it has remained free and open in the absence of burdensome Title II mandates.

3. The National Verifier has launched in 16 states where it lacks access to any databases for state-administered programs, such as the Supplemental Nutrition Assistance Program and Medicaid. Should an individual be informed that the National Verifier was not able to confirm their eligibility, they could reasonably consider this a denial from Lifeline, even though they may be eligible.

a. Given these issues, what specifically is the FCC or USAC doing to ensure the National Verifier connects with state databases in the states where it has launched or where it is planning to launch, and what is the timeline to do so?

Response: Issues related to the launch of the National Verifier system have been delegated to the Wireline Competition Bureau and USAC; therefore, I must defer to those entities on specific implementation issues. To the extent that appropriate and relevant issues are brought before the full Commission, I would certainly support efforts to ensure that a robust and accurate system is in place.

b. Given the above issues regarding the rollout of National Verifier, why is the FCC pushing forward to launch in more states rather than focusing on improving connections to federal and state databases in states where National Verifier is currently deployed?

Response: See previous response.

4. As the FCC considers USTelecom's petition for forbearance from key provisions of the Telecommunications Act of 1996, what has the FCC done to consider the impact of granting this petition on (i) small and medium-sized ISP's building out the fiber networks

needed for upgrading our country's wireless infrastructure to 5G and for closing the digital divide; and (ii) federal, state, local, and tribal government agencies, particularly those that will continue to rely on TDM-based telephone services through the continued availability of resale requirements?

Response: I have approached this proceeding with an open mind and will apply the requisite forbearance analysis in conformity with Section 10 of the Telecommunications Act. Accordingly, my door has always been open to stakeholders that currently rely on UNE elements, and I have closely reviewed the record in this proceeding.

5. Should the FCC further eliminate media ownership rules as it is considering, Americans may experience a sharp reduction in the breadth and diversity of voices available in any local media market. One entity could control all broadcast TV stations, local newspapers, and radio stations. This is a direct rebuke to a fundamental value that underpins our democracy. Please share whether you are considering such outcomes and to what degree you have concerns about the consolidation of media ownership.

    a. Has the FCC's newly created Office of Economic Analysis provided input on the impact of eliminating media ownership rules on consumer prices in the video marketplace?

Response: The realities of the current marketplace clearly demonstrate that the Commission's historical siloed approach to the broadcast market is completely outdated. In fact, it was the Commission's own ownership rules barring cross-ownership of newspapers that contributed to some degree to the decline of many local newspapers. Further, regarding radio and television, the competition broadcasters face from streaming and other over-the-top (OTT) providers for advertising dollars and listeners/viewers has eviscerated the appropriateness of viewing broadcasters through such a narrow, siloed lens. Specifically, when it comes to the radio subcaps under consideration in the Quadrennial Review, I am following the arguments for where best to establish new cap limits, if at all, on FM station ownership, but I have few hesitations about the prospect of further acquisitions by stations in general, and certainly not when it comes to AM stations. The long-term survival of many radio stations will depend upon their ability to combine into larger groups and achieve the scale needed to compete with the virtually unregulated streaming and OTT providers.

While I do not direct the work of the OEA, my understanding based on conversations with their staff, is that they are provided ample opportunity to analyze all the relevant issues related to each item that the Commission considers.

6. The FCC is considering a proposal to alter what may be considered toward the statutory maximum of five percent franchise fees (MB Docket No. 05-311). This would negatively impact the access of communities to public, educational, and governmental (PEG) programming. As I stated in my February 22, 2019 letter to the FCC, Congress clearly intended for communities to have access to PEG. The legislative history of the 1984

Cable Act explicitly states that franchise fees are only made up of monetary payments and do not include PEG contributions (H.R. Rep. No. 98-934 (1984)). Congress made its intent on this matter explicit and clear.

a. Under what statutory authority is the FCC considering this proposal which would have the effect of including PEG contributions in franchise fees?

Response: Given the level of detailed analysis regarding this matter in the notice of proposed rulemaking to which you are referring, I would point you to the discussion beginning on page nine, which provides an extensive discussion of the Commission's interpretation of the relevant statute, Section 622(g)(2) of *The Communications Act of 1934*, codified at 47 U.S.C. § 542(b).

The Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

The Honorable Yvette D. Clarke (D-NY)

1. It is wonderful to see how technology has broken down barriers for people with disabilities, but I am concerned this same technology can introduce new challenges for consumers. As the FCC considers moving to fully Automated Speech Recognition or ASR, I am concerned that fully automated ASR might not work as well for certain types of accents or voices. This could become a serious problem as we move towards widespread adoption of such services. Certain consumers might be left behind.

    a. What has the FCC done to investigate whether fully automated ASR for IP CTS does not feature implicit or inadvertent bias?

Response: I am fully committed to fulfilling our statutory mandate to provide functionally equivalent service to Americans with disabilities while minimizing burdens on TRS ratepayers. Thus, I have supported experimentation with alternative technologies, including ASR. While not perfect for all IP CTS consumers in all instances, ASR can undoubtedly be a helpful tool for certain segments of users, and technology has improved in recent years. In allowing service providers to use fully automated ASR, the Commission has made clear that providers using ASR must meet the Commission's minimum TRS standards. Further, the Commission continues to support IP CTS providers that do not use fully-automated ASR, thus ensuring that non-ASR options continue to be available to consumers.

    b. Will you commit to undertake such studies before certifying an ASR only provider?

Response: Should a draft Order to certify an ASR-only provider be circulated to the Commission, I will fully examine the applicable record prior to voting to grant the certification.

2. In considering the UST petition, does the Commission have the flexibility to take into account disparate market conditions or is it required to simply approve the petition as filed? Does the Commission have the flexibility to consider the impact of a natural disaster in a local market, such as Hurricane Maria in Puerto Rico, and how the local market conditions were and still are being impacted post-hurricane?

Response: In applying its forbearance analysis under Section 10, the Commission's precedent allows us to take into account disparate market conditions, if the record supports doing so. Further, the Commission has determined that it is authorized to grant partial forbearance, rather than the full extent of relief sought, and has done so several times in the past.

3. Will the Commission take into account the special circumstances of how Hurricane Maria devasted the local telecom infrastructure, as well as the local economy, into its consideration of the UST petition and whether such deregulation should occur at this time in Puerto Rico?

Response: My staff and I have met with stakeholders who described the special circumstances in Puerto Rico and USVI as a result of Hurricane Maria. I am aware of their concerns as they relate to the US Telecom forbearance petition, and I will apply the requisite forbearance pursuant to my statutory obligation, based on a thorough analysis of the record.

4. The Telecommunications Act of 1996 did not preempt local regulatory bodies from the Commission's evaluation of whether a market was competitive or not and thus warranted certain regulatory relief.

    a. Will you give deference to the input from the local jurisdictions as to whether the local market conditions warrant deregulation at this time, particularly in the case Puerto Rico where the recovery efforts are still ongoing?

Response: While I am considering the input of all parties describing granular market conditions in the context of the forbearance petition, the decision of whether to grant forbearance and to what extent belongs solely to the FCC, not local governments.

The Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

The Honorable Tony Cárdenas (D-CA)

1. It sounds to me like everyone is aligned on the need to improve the Commission's broadband data collection and mapping methods. Form 477 asks ISPs if they "could" provide coverage in addition to asking if they actually do.

    a. What is the value behind asking what areas "could" be served within the normal course of business?

Response: The Form 477 data has been used for different purposes, both inside and outside the Commission, and I have been a longtime skeptic of this data to the extent that it has been used for purposes for which it was not designed or intended. While I was not at the Commission when the current framework was established, perhaps this particular parameter might assist in forecasting future broadband deployment, particularly in the business data services context.

The Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

The Honorable Darren Soto (D-FL)

1. Late last year, the FCC initiated a proceeding looking at how to mitigate space debris. While I think it is a positive step to consider how to address this problem, the Commission may not have the technical expertise or the resources necessary to develop or enforce the complicated regulations it is considering proposing. Further, I understand the FCC has requested a reduced budget for these activities in FY20.

    a. Do you agree that it is important to ensure that any orbital debris mitigation regime be straightforward and enforceable?

Response: Generally, I believe that any and all regulations imposed on industry by the Commission should be relatively straightforward and enforceable. In the context of orbital debris, however, I acknowledge that the complexity of the issue may require more tailored solutions, but satellite entities must still understand in advance what is expected of them. I also acknowledge that other federal agencies possess technical expertise on this matter, and ideally, the Commission would work in tandem with these entities to develop a coherent and effective policy. However, these agencies have not adopted orbital debris policies, and the FCC is in the process of authorizing multiple constellations consisting of thousands of small satellites. If these agencies fail to act, the Commission will have to do so as part of its review of these NGSO applications in order to mitigate the potential calamities resulting from existing or future orbital debris.

    b. Please provide me with the number of employees supporting this project in total and the number of employees on this project with undergraduate or graduate degrees in relevant technical fields, specifically: aerospace, aeronautical, and/or astronautical engineering. Given the reduced budget you are requesting for FY20, is the FCC able to hire additional technical experts with degrees in these fields?

Response: Issues regarding the allocation of Commission resources are decided by the FCC Chairman; therefore, I must defer to him on this question.

2. What is the FCC currently doing to ensure that minority programmers are being included by providers; especially in Metropolitan Statistical Areas (MSA) with large minority communities that are currently being underserved?

Response: Addressing issues related to diversity in media has been a priority under the leadership of Chairman Pai. For example, in August of last year, the Commission adopted an order to implement an incubator program to make it easier for new entrants to join the radio broadcasting industry, and I have called for a similar program to be adopted for the television

broadcast industry. Specifically, with respect to independent programmers, the Commission already has in place robust regulations that restrict providers from demanding a financial interest or exclusivity in exchange for carriage, or from discriminating against unaffiliated programmers on the basis of non-affiliation. Pursuant to these regulations, a number of complaint proceedings have been adjudicated by the Commission's Media Bureau in a timely fashion since 2017. Beyond these steps, the Commission would likely need further statutory authority to take other actions on this matter.

The Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

The Honorable Robert E. Latta (R-OH)

1. When Congress passed the Americans with Disabilities Act in 1990, it directed the Commission to ensure that hearing and speech-impaired individuals be able to place and receive assisted telephone calls. Congress also directed that these telecommunications relay services be paid for equitably - with intrastate assessments used to fund intrastate services and interstate assessments used to fund interstate relay services.

   The Commission chose to "temporarily" fund the entire telecommunications relay service program through only interstate (and international) assessments and then repeated that "temporary" funding approach in 2007 when internet protocol service calls (IP CTS) were added to the program.

   As I understand it, last year the Commission proposed in its Further Notice of Proposed Rulemaking (FNPRM) on IP CTS to revise the funding mechanism so that all IP CTS calls would be recovered from all providers of, intrastate, interstate and international telecommunications, interconnected VOIP and non-interconnected VOIP providers.

   Commissioner O'Rielly, would you support moving the provisions of the 2018 FNPRM related to correcting the "temporary cost recovery method" expeditiously to create a permanent method in advance of the 2020-2021 TRS Fund year?

Response: While I am sympathetic to the point you raise, as I have expressed in the past, IP CTS is in my view fundamentally an interstate service; therefore, I am concerned that expanding the base of TRS contributors to include intrastate providers is outside the scope of the Commission's existing legal authority. Further, expanding the contribution base in this manner would potentially have an impact on the Commission's progress on jurisdictional separations, an increasingly anachronistic and unnecessarily burdensome process in our transition to an IP-driven industry. As an aside, I see certain services, such as non-interconnected VoIP offerings, as fundamentally different than many other communications products, and I would be concerned about attempts to treat them otherwise.

2. My concern is about how we deliver broadband to all Americans, especially unserved and underserved Rural America. One technology will not be the panacea for this challenge, but we will need a combination of solutions. Can you comment on what role you see spectrum playing in rural America and discuss if you think spectrum sharing is a feasible part of that solution?

Response: Spectrum-based services, including both terrestrial wireless and satellite offerings, will likely play a large role in providing broadband to unserved America. Deployment of these services is far more economical and feasible than trying to lay fiber to the most remote parts of the country. Both exclusive use licenses and sharing models have been used – and will continue to be used – to bring service to rural America. While my primary objective is to clear spectrum for exclusive use licenses, as we are considering in the current 3.7-4.2 GHz proceeding, sharing makes sense in those bands where it is infeasible to relocate or accommodate all incumbents elsewhere, such as the 6 GHz band, which is under consideration by the Commission.

The Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

The Honorable Greg Walden (R-OR)

1. Would you support the Chairman's effort to move forward in evaluating appropriate allocation of the 5.9 GHz band at this time? Why or why not?

Response: Yes; I have been a loud voice for the need to conduct a review of the 5.9 GHz band since I joined the Commission. We cannot continue to allow valuable spectrum, which has generally been unused for two decades, to continue to lay fallow.

Since this spectrum was allocated for automobile safety systems, technology has evolved and many of the auto safety uses have been implemented using other spectrum-based services, requiring a fresh look at this band. First, even if DSRC is to be deployed, a rulemaking is needed because the Commission's existing rules are based on a twenty-year-old standard that needs to be updated at a minimum. Second, many automobile manufacturers want to deploy a different technology, commonly called C-V2X, for their safety systems, so the Commission needs to take this into consideration. Third, this spectrum, which is adjacent to the 5 GHz unlicensed band, is much needed to expand unlicensed operations, such as Wi-Fi. The Commission must consider all these issues to ensure that these frequencies are efficiently used and, to the extent that they are used by the auto industry, that they are only used for safety-of-life applications.

The Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

The Honorable John Shimkus (R-IL)

1. Under the FCC's oversight, the Universal Service Administrative Company (USA) has worked to establish a "National Verifier" system to combat fraud in the Lifeline program by ensuring all applicants are eligible for Lifeline benefits. It is my understanding USAC is actively transitioning many states from "soft-launch" status, in which participation in the National Verifier system is voluntary, to a mandatory verification system. I want to ensure that we expeditiously continue this transition to a more secure and accurate verification system. Please describe how the FCC, working with USAC, will continue the push for implementation of a robust mandatory National Verifier system.

Response: Issues related to the launch of the National Verifier system have been delegated to the Wireline Competition Bureau and USAC; therefore, I must defer to those entities on specific implementation issues. To the extent that appropriate and relevant issues are brought before the full Commission, I would certainly support efforts to ensure that a robust and accurate system is in place.

The Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

The Honorable Gus M. Bilirakis (R-FL)

1. Commissioner O'Rielly – the 1996 Telecommunications Act states that temporary, competition jumpstarting price controls should be scaled back once the intended competition is created. Over the past 23 years, the voice and broadband market has completely changed.

   Is the market sufficiently competitive to reassess these price controls, at least on a geographic basis?

Response: Facilities-based competition has arisen in many markets via differing paths, and in some cases without the assistance of the 1996 Act's provisions. Over the years I have supported Commission actions to remove regulatory asymmetry and permit the expansion of free enterprise in those instances consistent with our statutory authority and obligations. As there is currently a Commission-level item pending on forbearance from the 1996 Act's unbundling provisions, it may be best if I decline to comment on my determination in that proceeding until a later time when the content of the item becomes public.

2. The Commission recently issued a Notice of Proposed Rulemaking to allow unlicensed, indoor wifi use of the 6HGz band. There seems to be widespread agreement that additional spectrum is needed for indoor unlicensed applications but there are questions about whether increasing unlicensed spectrum across the entire 6GHZ band would cause harmful interference t incumbent outdoor licensees.

   A group of home builders stated in the record that ever-increasing energy-efficiency building codes established by the Department of Energy (DoE) directly impact wireless penetration of a building's outer envelope. This could impact whether or not the proposed indoor use would cause outside interference. The Leading Builders of America showed that many materials found to impact wireless penetration, such as brick and metal, increasingly go into new homes in order to comply with energy efficiency requirements in building codes.

   Commissioner O'Rielly – would it be advisable to set up a working group between the DoE's Office of Energy Efficiency and Renewable Energy and the FCC's Office of Engineering and Technology to help understand better the interaction between modern building codes and indoor ireless? Would you be willing to contact the DoE to consider a working group on this topic?

Response: I absolutely believe that the Commission needs to explore whether and how modern building codes and materials affect the propagation and attenuation of wireless signals. Although within the purview of the Chairman, if asked, I would be pleased to have discussions

with DOE to explore this topic and obtain the data the Commission needs to inform its decision making, whether it be through a working group, formal proceeding or another mechanism.

The Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

The Honorable Susan W. Brooks (R-IN)

1. I firmly believe that letting the private sector compete is the best way to ensure the U.S. will be the world leader in 5G technology. Can you address criticisms of that idea and the notion that the U.S. should nationalize a wholesale 5G network to somehow ensure its leadership in this space?

Response: I absolutely agree that the U.S. should continue to allow the private sector to invest in and build out our wireless networks, and that competition is the reason why the U.S. is the leader in wireless technologies. Those who argue that we should abandon this highly successful approach appear to argue that (1) an expeditious buildout of 5G can only be done by one entity, (2) a standalone wholesale 5G network is the only way to ensure a secure system, and (3) this is the way to stop China's goal of 5G dominance. These assertions are fatally flawed, which I discussed in depth in a recent blog on the matters, which can be located online at https://www.fcc.gov/news-events/blog/2019/05/07/substantive-objections-government-5g-wholesale-network

The Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

The Honorable Tim Walberg (R-MI)

1. As you know, broadband mapping has been a concern among a bipartisan group of Representatives and Senators. As the Commission contemplates future reverse auction mechanisms within the USF program, it is important that the Commission not only improve its own maps but also coordinate with other Federal agencies on their mapping of broadband availability and broadband support mechanisms tied to such mapping. I appreciate your leadership in taking initiative to update the Commission's map, and I look forward to the completion of the FNPRM in WC Docket No. 11-10.

    a. During the hearing, you stated that, "absent Congressional, statutory language, [other agencies] have a tendency to go their own route."

    As Congress contemplates authorizing new or additional authority on broadband mapping and coordination:

        i. How do we ensure that definitions of "unserved," "underserved," and "served" are appropriately tailored to prevent this duplication, while allowing agencies to continue offering broadband support that appropriately complements other agencies' efforts?

Response: While I will always defer to the will of Congress, I believe that any new broadband subsidies should be targeted toward reaching unserved populations, rather than areas where service already exists. In addition, agencies should not use scarce public funds to overbuild existing networks. To prevent duplication and waste, new broadband funding should be restricted by statute to completely unserved populations; the definition of "unserved" ought to be expressly spelled out; and legislation should explicitly prohibit funding from going to areas already receiving support under existing programs, including the Commission's Connect America Fund. Further, a challenge process ought to be established before any new funding goes out the door.

        ii. How do we ensure that definitions of "broadband" are tailed such that agencies cannot evade the intent of potential statutory authorities to comply with coordination?

Response: The definition of broadband should be uniform across the federal government. One way to ensure that other agencies do not engage in wasteful gold-plating would be to require other agencies to adopt the FCC's definition of broadband. Moreover, this definition shouldn't fluctuate until every American has the opportunity to access broadband. Otherwise, funding will inevitably flow to upgrading those areas that are easier and cheaper to serve, rather than

addressing those without broadband today. While this may appear to create a static situation, on balance it is a worthy and necessary tradeoff in bringing access to the unserved.

iii. How do we ensure that different types of data collected by various agencies are driven by minimally acceptable levels of granularity so that agencies can standardize data collection and reduce instances of overbuilding?

Response: I certainly agree that it is important to balance the appropriate level of granularity of the underlying data with the applicable costs and benefits. In my view, this should be addressed legislatively to ensure uniformity across the federal agencies. Additionally, to ensure accuracy, any mapping effort must incorporate a challenge process.

2. During the hearing, I briefly asked about the need for a more robust, capable workforce for the communications industry. As you know, even with unlimited spectrum, siting reforms, or Federal dollars, none of these will get 5G, next generation fiber networks, or broadcasting infrastructure into the market without a skilled, professional workforce capable of deploying it in a timely manner.

   How is the Commission approaching this workforce issue, and what steps can the Commission take to get all stakeholders to the table and create good, high-paying jobs that maintain technological leadership here in the United States?

Response: The need for a robust and well-trained workforce is an issue I raised early in my Commission tenure as part of the Commission's broadcast incentive auction repack. It came to my attention that the number of tower crews trained to climb the tallest broadcast towers was not sufficient to perform a timely repack. While the Commission's authority is limited in this area, I have spoken to and worked with industry trade associations, such as the Wireless Infrastructure Association, CTIA, NAB, and others, to ensure that programs are in place to provide adequate training for such high-skilled – and oftentimes hazardous – jobs. Furthermore, the Chairman has created a working group, as part of his Broadband Deployment Advisory Council (BDAC), to explore this very issue.

b. Would the Commission benefit from a longer-term viewpoint and approach to this issue if it were elevated and authorized in statute to a full advisory committee as opposed to a working group under an existing advisory council?

Response: To the extent the Commission has a role, it appears that this issue is being adequately considered as part of the BDAC charter, which can be extended by the Commission, if necessary. But, if there is a need, the Chairman has the ability also to create a separate advisory committee on the matter.

3. As you know, our valuable spectrum resources have only become increasingly important as more market entrants seek access to provide new or important services. Additionally, incumbents providing valuable services have enjoyed an expectation of renewal, and they have traditionally been made whole for any transition to comparable facilities—both spectrum or otherwise.

   Consistent with the Commission's statutory mandate to assign licenses, "if public convenience, interest, or necessity will be served thereby…",[1] it is important for the Commission to have a full, robust record in order to make such a determination. With regard to the Commission's open proceeding on the 6 GHz band, have all interested parties—including incumbents—fully participated in the Commission's process—whether through *ex parte* presentations, providing technical engineering studies to the Office of Engineering and Technology (OET) regarding the proposed Automatic Frequency Coordination (AFC) mechanism, or filing in the record?

Response: Given the Commission's open process, it appears that there is a robust record in the 6 GHz proceeding, and stakeholders, including incumbents, continue to file ex partes and studies supporting their positions. Further, I have had many meetings with interested parties on both sides of the various issues raised in this proceeding, including the use of the AFC for indoor access points, such as in-home Wi-Fi routers.

4. One of the concerns with the USF program—often articulated by smaller, rural providers like those in my district—is the reporting or regulatory burden on those providers. As you know, however, eligible telecommunications providers have several requirements that help the Commission that root out waste, fraud and abuse.

   When it comes to the problem of overbuilding, would you recommend adding an eligibility requirement to ETCs that they disclose whether, and how much, if any, support they receive through the Department of Agriculture's or other Federal broadband support programs?

Response: I firmly believe that we must do everything we can to prevent government-subsidized overbuilding, and I have encouraged Congress to establish clear legislative guardrails to ensure that any new broadband funding go only to unserved Americans. Agencies ought to determine if an area is already funded before awarding new support. Adding an eligibility requirement to ETCs to disclose their support from other federal broadband programs may be helpful to some degree for dealing with inter-agency overbuilding. However, it may be of limited assistance in addressing when a specific agency funds more than one provider in a given area using multiple of its own accounts, as in cases where USAC approves E-Rate and High Cost funding in the same service area.

[1] 47 U.S.C. 307(a)

a. Since providers often use USF support and RUS support in complementary ways, would such a requirement be more helpful if paired with requirements to disclose whether another provider is receiving funds to construct or operate a network within an ETC's footprint so the Commission could investigate before making an award under the USF program?

Response: In awarding support through the High Cost program, the FCC has traditionally excluded areas already served by a non-USF-subsidized competing provider. To identify those areas, the Commission has relied on, albeit flawed, Form 477 data, which may not adequately capture whether another provider is receiving funds from another agency to construct or operate a network within a given area. While I have supported the use of challenge processes to help correct flawed data and have advocated for clear rules governing inter-agency coordination, requiring ETCs to make such a disclosure (provided they have access to the requisite information) may help in preventing duplicative awards in certain instances.

5. While the Commission is not and should not be the lead Federal agency responsible for the cyber security of our communications networks, the Commission can still play an important role in the integrity and security of those networks. When it comes to 5G and next generation mobile networks, one of the principal ways to achieve security is through the adoption of open-source, merit-based, voluntary industry standards—like 3GPP or IEEE.

   However, our strategic competitors have begun to weaponize these international standards bodies to advance their security agenda, and the U.S. is at risk of failing to keep up with the scale and sophistications of contributions made by researchers and engineers from our strategic competitors. In order to maintain U.S. leadership, we must continue to send our best and brightest to these standards bodies to keep pace in leadership posts and merit-based contributions.

   a. To that end, what is the Commission doing to promote our U.S. industry in these conferences, and is there more the Commission could do to bolster these efforts?

Response: I am well aware of certain countries' attempts to use standards setting bodies, such as 3GPP and IEEE, and multi-stakeholder organizations, such as the ITU, to advance their goals, which can run counter to the interests of the United States. In fact, I have discussed these problems publicly multiple times, including in speeches and blogs. In the context of the various standards setting bodies, the FCC and other government agencies have representatives who attend these meetings. The Commission should ensure that our representatives attend all meetings and vote on issues of importance to U.S. industry. Moreover, the Commission also should continue to work with industry so that we are aware when they have concerns with any particular standard setting process. When it comes to ITU conferences, and the World Radiocommunications Conference (WRC) in particular, the FCC continues to promote 5G, advocate for the adoption of our 5G spectrum bands and technical rules internationally, and ensure our future leadership in next-generation wireless technologies. Unfortunately, as has been

reported in the press, other federal agencies have not been supportive of the FCC and Administration's 5G agenda, but we also continue to work with them to find common positions.

b. Who else should be involved in these efforts?

Response: It is important that all U.S. wireless providers, manufacturers, and trade associations are active in this important matter. In the standards setting bodies, each entity has a vote. Therefore, the chances of success are increased if more U.S. companies attend these meetings. Similarly, each country has one vote in ITU conferences and preparatory meetings, so the U.S. needs to advocate for and convince the majority of the 193 member nations to support our specific positions. To be successful, we need an active and aggressive U.S. wireless industry to attend WRC and the preparatory meetings to provide their insight and expertise.

6. The Commission has been very vocal about the need for more mid-band spectrum in order to maintain U.S. leadership in 5G. While the Commission is contemplating action in the L-Band, 2.5 GHz, C-Band, and 4.9 GHz band, the CBRS Band is much further along to commercial deployment. Industry is ready to go, with several ESC systems approved and being deployed. Yet the Spectrum Access Systems are still awaiting FCC approval. What is the Commission's outlook on getting these final certifications finalized and getting the spectrum to market?

Response: I agree that the process of getting the Spectrum Access Systems approved and deployed has taken longer than expected. Unfortunately, the completion of the testing by NTIA's ITS was delayed, but on June 21, 2019, ITS sent the draft final reports on the lab testing to potential SAS operators. They have a chance to review them before they are finalized and submitted to the FCC and DOD for review and final certification. I am hopeful that FCC staff and DOD will be able to finish the review of these reports expeditiously, allowing for the final certifications of these systems. It is my expectation that this can be completed by early September.

Attachment—Additional Questions for the Record

Subcommittee on Communications and Technology and
Hearing on
"Accountability and Oversight of the Federal Communications Commission"
December 5, 2019

The Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

The Honorable Anna G. Eshoo (D-CA)

1. The decision to increase minimum service standards was proposed in conjunction with a port freeze. Coupling these items was essential for increasing service, while also reducing waste, fraud, and abuse. Why is the FCC moving forward with just increasing minimum service standards which has caused carriers to cease providing Lifeline services?

Response: I am committed to the Commission's obligation to ensure the availability of robust and affordable services for low-income consumers, and I recognize that the minimum standards originally set to go into effect in December 2019 had the potential to disrupt service for many participants. That is why, in November 2019, the Commission granted, in part, a petition seeking waiver of the Commission's 2019 scheduled increase to the Lifeline Program's minimum standards for mobile broadband usage. While that order did not address the issue of port freezes, the decision to pause the minimum standard increase at 3 GB/month will hopefully ensure that the program remains accessible to low-income consumers, while simultaneously reflecting the current marketplace for mobile data usage.

2. The FCC found that "the large increase in the minimum standard for mobile broadband usage could unduly disrupt service to existing Lifeline subscribers." Would the FCC suspend the implementation of next year's minimum service standard if a similarly large increase is anticipated again?

Response: I am open to considering further adjustments to scheduled increases to the Lifeline program's minimum standards, should any be necessary.

3. Is the FCC considering opening a new proceeding to revisit the appropriate formula for calculating minimum service standards for Lifeline mobile broadband service?

Response: The Commission's agenda is controlled by the Chairman, and I therefore must defer to him on this question.

4. You've raised network security issues as a major concern of yours. Beyond supply chain issues, which the FCC and our Subcommittee have worked on, what other

recommendations can you make relative to securing our nation's wireless networks—for example, addressing SIM swaps, carriers' usage of dated encryption and authentication algorithms, and the threats of cell simulators or IMSI catchers?

Response: Many of the challenges you mention above are being considered by national security and law enforcement agencies. The Commission's authority in this area is limited, but the FCC will continue to work with and advise these other federal agencies, which have greater expertise and information regarding the threats to and incursions into wireless networks. As you know, Congress has passed multiple laws regarding network security and privacy and has declined to give the Commission further jurisdiction. If Congress decides to expand the Commission's role, I will implement Congress's direction.

5. Some are proposing allocating spectrum in the 6 GHz band for licensed use, by relocating incumbents to the 7 GHz band, though that band is currently occupied by government entities, including the Department of Defense. How long has the FCC been working with the federal government on allocation of 7 GHz?

Response: While I am aware of the federal allocations in the 7 GHz band and have spoken of the potential of that band for commercial services, the Commission has not yet considered or voted on any items regarding 7 GHz. At this time, the Chairman is in a better position to discuss whether there are current conversations regarding the possibility of moving any current incumbents into that band or whether the band is capable of accommodating future commercial services.

6. As you have recognized, the need for unlicensed spectrum is as high as ever, and it's growing. Some have raised concerns about harmful interference to microwave services if unlicensed devices would be allowed to operate in the 6 GHz band. Do you have the data necessary to create rules for these two services to coexist?

Response: Yes. Data has been submitted and the engineers in our Office of Engineering and Technology are currently considering what protections are needed for existing incumbent licensees. As I have said before, I believe that we will be able to introduce unlicensed services into the band while protecting incumbent operations.

7. One promising innovation in wildfire mitigation is the Falling Line Conductor that uses low-latency, private LTE networks to depower a broken line before it hits the ground and becomes a fire hazard. Do you have a view on how such technologies can help mitigate wildfire threats and the need for preemptive electrical shutoffs? When will the FCC complete its 900 MHz proceeding that impacts the ability of utilities to use such technologies?

Response: I am aware of utility companies' interest in the 900 MHz band and its potential use to prevent damage from falling power lines. While there are benefits to restructuring the band, some utilities – including incumbent users – have previously raised concerns with the various plans in the record. It is my understanding that the Commission staff

continues to work through these issues and that an order may be ready soon for that purpose. As for the exact timing of the order, however, I must defer to the Chairman.

8. On June 11, 2019 at a USTelecom Forum on robocalls, Chairman Pai said "Now that the FCC has given you the legal clarity to block unwanted robocalls more aggressively, it's time for voice service providers to implement call blocking by default as soon as possible." I couldn't agree more. Have carriers responded to this call to action? Have companies raised legal, technical or other objections with these actions requested?

Response: In the June 2019 item referenced in your question, the Commission directed the Consumer and Governmental Affairs Bureau (CGB) to issue two reports on the implementation and effectiveness of blocking measures by providers. Pursuant to this directive, in December 2019, CGB sought input from providers and the public on the availability and effectiveness of call-blocking tools and the impact of FCC actions, among other relevant matters. As such, I look forward to reading the staff's report and will wait until it is issued before commenting on service providers' actions in response to the June 2019 Declaratory Ruling.

With respect to objections raised in response to the June 2019 Declaratory Ruling, many parties, including myself, have expressed concern over the vast amount of discretion given to providers to determine what constitutes an "unwanted" call; the vagueness of the term "reasonable analytics" as the standard for offering call-blocking programs on an opt-out basis; and the need for providers to adopt expeditious processes to correct call blocking errors, and ensure that legal, wanted calls are delivered to consumers.

9. At the same USTelecom event in June, Chairman Pai said that "USTelecom has been particularly helpful in making sure that we can quickly trace scam robocalls to their originating source." How successful has USTelecom's Industry Traceback Group (ITG) been in combatting robocalls?

Response: I appreciate industry efforts to support law enforcement in traceback efforts and the ITG is a laudable initiative in this respect. In terms of the ITG's success in assisting law enforcement, I would have to defer to the expertise of the FCC's Enforcement Bureau.

10. A *Wall Street Journal* article titled "Small Companies Play Big Role in Robocall Scourge, but Remedies Are Elusive" states that "The FCC has asserted limited jurisdiction over VoIP providers, an agency spokesman said." What prevents or limits the FCC from using existing statutory authority to take enforcement actions against VoIP providers?

Response: The FCC has never classified VoIP's status under the Communications Act, and I have repeatedly called on the Commission to clear up this confusion and declare VoIP an interstate information service. Despite this ambiguity, VoIP certainly does not exist in a regulatory-free zone. Indeed, the Commission has repeatedly subjected

interconnected VoIP to regulatory requirements under the Communications Act's Title I authority, including 9-1-1 obligations, Universal Service Fund contributions, Telecommunications Relay Fund contributions, and requirements under the Communications Assistance for Law Enforcement (CALEA) Act.

Further, interconnected VoIP has always been subject to the Commission's Truth in Caller ID Rules, and, in August 2019, the Commission extended that regulatory regime to apply to one-way VoIP. Therefore, in my opinion, a lack of regulation is by no means responsible for the menace of illegal robocalls. Rather, one reason why it is often so difficult for the FCC to take enforcement actions against illegal VoIP traffic is because much of it originates overseas. Exercising extraterritorial jurisdiction over illegal scammers can be difficult in practice, particularly when they are based in uncooperative nations.

11. The FCC's "Report on Robocalls" (CG Docket No. 17-59; February 2019) states that "Five providers that had been identified as uncooperative in traceback have taken steps to participate going forward." Have these five providers continued cooperating with traceback efforts? Do *any* providers remain that are not being cooperative?

Response: Issues related to the call traceback process are handled by the FCC's Enforcement Bureau; therefore, the Commission's Enforcement Bureau and the Chairman are in better positions to answer this question.

The Honorable Peter Welch (D-VT)

1. A lack of broadband connectivity can impact all aspects of our lives: keeping children on the wrong side of the homework gap from realizing their full potential, posing barriers to telehealth solutions that can improve care, keeping farmers from capitalizing on advancements in precision agriculture, and limiting economic opportunities for workers and small businesses. However, I have been encouraged by the Commission's support of innovative solutions, specifically TV white space, that can enhance the pace, reach and cost-effectiveness of broadband deployment in rural communities. The adoption of a final order in the TV white space (TVWS) reconsideration proceeding earlier this year marked an important first step, and I encourage the Commission to build on this step by issuing a Further Notice of Proposed Rulemaking (FNPRM) to address remaining regulatory hurdles to greater TVWS deployment as soon as possible. By taking this step, the Commission can update its rules surrounding TVWS, which will increase the potential for rural broadband deployment and, subsequently, the availability and adoption of Internet of Things (IoT) applications throughout rural areas.

a. Will the Commission make the adoption of a TV White Space Further Notice of Proposed Rulemaking a priority to complete as soon as possible and no later than the first quarter in 2020?

Response: I have been actively involved with the TVWS community in trying to make the rules more flexible to accommodate additional and higher power services, especially in rural areas. It is my hope that an NPRM could be released in the very near future, but I must defer to the Chairman on the exact timing.

The Honorable Greg Walden (R-OR)

1. As I stated at the hearing, ending diversion of 9-1-1 fees is a priority for me. According to recent reports submitted to Congress pursuant to the New and Emergency Technologies 9-1-1 Improvement Act of 2008, states and taxing jurisdictions are still diverting 9-1-1 fees for purposes other than 9-1-1. What statutory tools would be useful for the Commission, or other entities, to stop states from diverting 9-1-1 fees?

Response: Thank you for your attention to this matter, including your effort to link ending the practice of 9-1-1 fee diversion to eligibility for T-Band-related changes. I especially appreciated your raising this issue at the hearing and look forward to continuing to work with you on this problem, including by providing specific technical assistance on draft text. Two urgent statutory changes that would better equip the Commission to end the reprehensible practice of fee diversion include lengthening the mandatory compliance period from 180 days to at least 5 years for a state to be eligible for federal grants, and broadening the prohibition on diversion to include any fees described as "public safety" fees.

On the latter point, there is one particular state seeking to circumvent the statute by including a separate "public safety" fee that goes to the state's general fund, in addition to its legitimate "9-1-1" fee. As frustrating as this practice may be, some other states have been attempting similar stunts, arguing that they meet the letter of the law because the 9-1-1 portion is clearly accounted for in the statute. However, creating a slush fund under the guise of public safety violates both the law's letter and spirit.

As a further example of abuse, another state flagrantly stole 9-1-1 fees to pay for a state university professor buyout program but attempted to come back into compliance just in time so as not to implicate the 180-day bar on applicants applying for certain federal grants. Thankfully, this mischief can be cleaned up relatively easily. Lengthening the "clean period" to at least 5 years prior to applying for any federal grants would significantly increase the incentive for states to come into compliance and remain so for a longer period of time, and undermine the temptation to divert for one or two years to meet a budget shortfall and then come back into compliance just in time to apply for new grant money. This reform will be even more important as Congress considers additional funding for NG911 and other upgrades in the future to 9-1-1 systems.

The Honorable Robert E. Latta (R-OH)

1. As the author of the Precision Agriculture Connectivity Act that was included in last year's Farm Bill, I am interested in the economic benefit of GPS to the agriculture sector. Talking to farmers in my district, I know GPS can improve farm planning, field mapping, soil sampling, tractor guidance, crop scouting, variable rate applications, and yield mapping. All this innovation relies on connectivity, including that provided by GPS. How will the Commission continue to protect GPS services from harmful interference?

Response: Whenever the Commission seeks to introduce new services in a band, the Commission not only seeks comment on the issue, but also directs staff to analyze the appropriate mechanisms and technical rules needed to ensure that existing incumbents will be protected from harmful interference. Such an analysis will be done if new services are to be introduced on frequencies being used by GPS or adjacent to GPS bands.

The Honorable Adam Kinzinger (R-IL)

1. Chairman announced just before the Thanksgiving break that the Commission will proceed with a public auction to repurpose 280 MHz of the C-Band. While there was a lot of debate about how the FCC was going to proceed on this band, there was one principle that seemed to be universal—these proceedings need to occur as quickly and efficiently as possible. I personally was open to either mechanism as long as we held to this principle of doing things quickly, plus one other principle—that substantial revenues be raised for the Treasury, hopefully for rural broadband deployment and similar programs.

   During the hearing, I asked Chairman Pai the following questions:

   Given that most stakeholders estimate a public auction will take longer than a private sale, what can Congress do to help speed up this public auction?

   Does the FCC need new authorities, or new appropriations to hire temporary staff or speed up the auction software procurement process?

   While the Chairman provided thoughtful answers in response, I ask that the Commission follow up with the Committee to offer any supplemental information or ideas in terms of new authorities or appropriations that would assist in expediting the C-Band Auction, including the process of preparing for the auction and perhaps the auction itself. Please be as detailed as reasonably possible.

Response: I agree that this auction needs to occur as quickly as possible, which is why speed has been one of my leading principles as well. The Chairman has stated that he prefers an FCC-led auction, so that is the path the Commission is pursuing. Whether we need additional funds or authority may depend upon the procedures proposed by the

Chairman. As you know, there has been much discussion about whether the Commission can use auction funds to provide an incentive for the satellite providers to surrender their rights to the spectrum and how much that payment should be, among other issues. Of course, if Congress wishes to address this matter legislatively, we will implement Congress's direction as instructed. In terms of broader authority, the Commission could benefit from clear instruction and necessary resources to enable it to operate multiple auctions at the same time. Otherwise, those auctions already slotted for action prevent others from being carried out with timely resolution.

2. I appreciate the work the Commission has done on the 24 GHz band in the months leading up to the World Radio Conference (WRC). You may recall I asked you all about 24 GHz band back in the hearing earlier this year. And when Mr. Knapp was here in July, I also expressed my concerns that the government was not speaking with one voice on making the 24 GHz band available for 5G services. Mr. Knapp told me he was confident that 5G and weather services can coexist given the 250 MHz guard band. The work you and your team did, and continues to do, is important and critical as we move closer to a 5G world.

   Now that there is an agreement on the protection values—and these values, which were agreed to at the WRC but are different from that contained in the FCC rules—will the FCC open a proceeding to adopt these new protection parameters? If not, then what will the FCC be doing to protect these critical passive weather sensors from harmful 5G interference?

<u>Response</u>: I was – and continue to be – confident that the Commission's rules were adequate to protect weather sensors from harmful interference. I believe that the protection criteria adopted at WRC are overly protective and could have negative repercussions on the 5G services provided by wireless network operators in the lower portion of the 24 GHz band. However, that is what was agreed to at the WRC, and it is likely that all equipment manufactured for the 24 GHz band will be designed to comply with these international metrics, as opposed to the FCC rules. As to whether there will be a proceeding to change our rules, I must defer to the Chairman.

3. During the hearing, I asked Chairman Pai the following questions:

   Are there cybersecurity or physical security concerns if information and communications technology companies allow non-cleared or un-vetted personnel access to software development kits or application programing interfaces for 5G networks?

   Is there a common standard to use vetted personnel, AI, or machine learning to analyze source code that will be distributed or used in patches for software updates of 5G equipment?

   While the Chairman provided thoughtful answers in response, I ask that the Commission follow up with the Committee to offer any supplemental information or

ideas regarding the ways in which the Commission, using existing authorities, or Congress, by enacting new legislation, can bolster the physical security and cybersecurity of our 5G networks. Please be as detailed as reasonably possible, and if the Commission feels that these responses are best conveyed to the Committee in a confidential manner in order to protect our national security, please indicate as much to the Committee and we will work with you all to make appropriate arrangements.

Response: As you know, the FCC's authority in this area is limited, but the Commission will continue to work with and advise other federal national security and law enforcement agencies, which have greater expertise and information regarding the actual threats to and incursions into wireless networks. In the past, Congress has passed multiple laws regarding network security and has declined to give the Commission further jurisdiction. If Congress decides to expand the Commission's role, I will implement Congress's will.

The Honorable Tim Walberg (R-MI)

1. As Co-Chair of the 5G Caucus, it is my priority to ensure the U.S. is leading the world in the innovation of 5G networks. The Committee recently passed my legislation, H.R. 4500, the Promoting United States Wireless Leadership Act, which plays an integral role in providing a unified front of industry and government to assert the United States' leadership in 5G standards worldwide, by directing the NTIA to encourage the participation of American companies and other relevant stakeholders in international standard-setting bodies.

    a. Can you elaborate on how important it is for us to secure our nation's 5G supply chain and how important it is for U.S. companies to be involved in the development of 5G technologies worldwide.

Response: It is absolutely critical for U.S. companies to be involved in the development of 5G technologies worldwide and to secure the supply chain. I have spoken extensively on this issue and I would like to direct your attention to a speech that I gave last year that provides more details,[1] along with my comments about the World Radiocommunication Conference (WRC).

In sum, there are some countries that have tried to use multi-stakeholder organizations to skew standards or delay our progress to favor their service providers and manufacturers, claiming that innovation is happening too quickly or that incumbent operations need extraordinary protections. They have levered these arguments to try to slow down our progress, hinder our ability to be a technology leader, protect their industries, or, in some cases, ensure that there is an adequate return on investment for prior technology generations. Unfortunately, I witnessed this behavior by countries such as China, Russia,

[1] *See, e.g.*, Remarks of FCC Commissioner Michael O'Rielly before the Brooklyn 5G Summit 2019, Apr. 25, 2019, https://docs.fcc.gov/public/attachments/DOC-357184A1.pdf.

and France at the WRC in November 2019. Similarly, in regard to the private sector standards bodies, I am aware of instances where the standards setting process was being used intentionally to slow down U.S. innovation because our technology is ahead of other countries.

Delaying U.S. and other western nations' technology enables Chinese technology to gain a foothold. In fact, China is the nation most likely to exploit international bodies to promote their companies' technologies while delaying U.S. innovation. China's behavior is even more alarming when you combine it with their centrally planned economy. China's companies obtain government-sponsored advantages, such as subsidized labor, low-cost loans, and unlimited operating capital, which they use to lock down their domestic market, expand their reach internationally, and gobble market share in each country they enter.

This clearly anticompetitive behavior, along with Chinese companies' ability to provide cheap equipment and labor, enables China to offer an attractive telecommunications offering to many countries and obtain market share internationally. Further, by exporting equipment that is not interoperable with other equipment brands, Chinese companies ensure that once a wireless provider or country invests in their equipment, they are beholden to that Chinese manufacturer. Not only does this have the potential to push western equipment manufacturers out of the market and increase concentration, but it also has serious national security repercussions, in potentially allowing the Chinese government to access information that touches their equipment or is carried on their networks.

Senate Committee on Commerce, Science, and Transportation
"Oversight of the Federal Communications Commission"
Hearing held on Wednesday, March 8, 2017
Questions for the Record to FCC Commissioner Michael O'Rielly

1. Question by Senator Cantwell

At a time when the need for funds to support broadband deployment and adoption are at their highest, the universal service contribution factor is approaching its highest levels due to the declines in the interstate revenue that serves as its funding base. There is wide consensus that the current contribution methodology model is unsustainable.

The demand for more money for rural broadband is causing some industry stakeholders suggest reducing the amount of USF committed to support broadband service for our nation's schools, libraries and low income consumers.

We should not be "robbing Peter to pay Paul." Instead as good stewards of the universal service fund and the mandate for universal service found in the Telecommunications Act, we should be figuring out the best way to create a sustainable universal service ecosystem.

Part 1
Do you agree that the current contribution methodology framework is unsustainable?

I would like to make it clear that, as the newly appointed chair of the Federal State Joint Board on Universal Service, I am speaking only for myself in answering this question. I agree that the contribution methodology framework is unsustainable, as currently structured, and have said so publicly many times.

Part 2
Do you advocate lowering the amount of USF committed to the E-Rate and Lifeline/Link up programs and shifting those moneys to support the USF mechanisms that support rural broadband?

I believe that in order to properly assess how to allocate spending among the four USF programs the Commission should determine the appropriate sum to take from telecommunications consumers, recognizing that doing so raises the price for service and leads to lower adoption rates. Accordingly, I strongly support having firm budgetary caps on all USF spending.

To be clear, I did not support expanding the E-Rate budget and spending in the December 2014 order. I argued that such expenditures would come at the cost of other programs or lead to a ballooning of overall USF spending, which seems to have come to fruition. Likewise, I raised objections to and opposed the unwillingness of a majority of my colleagues to adopt a proper budget for the Lifeline program when it was last considered by the Commission in March 2016. I support efforts to correct these decisions and to make other improvements.

Part 3
Over the years, the FCC has reviewed several different proposals to reform contribution methodology to shore up the contributions base.
Among the proposals made to reform contribution methodology are:
Numbers Plan–all communications service providers with working, "in use" telephone numbers (or equivalents) would be assessed a flat, per number fee;
Connections Plan –all connections to an interstate public or private network would be assessed a flat, per number fee;
Numbers/Hybrid Plan –would assess residential users a fee based on working numbers and business users a fee based on working connections; and
Modified Revenue–expanding the contribution base to maintain current system, require broadband providers and other communications service providers to contribute.

Has the Commission done any study of how any of the previously proposed contribution methodology reforms would impact the contribution factor or the universal service fund? If so what did those studies reveal?

My understanding is that Commission staff previously studied various reform options as part of their work for the previous USF Joint Board. I was not on the USF Joint Board at that time, so I have asked Commission staff to brief me on their analyses in the near future.

Part 4
Does the Commission have plans to reform contribution methodology? If so when? If not, why not?

I cannot speak to the Commission's ultimate plans, but, as the new chair of the USF Joint Board, it is my goal to address our overall USF spending and the contribution methodology in order to provide a recommendation to the Commission for its consideration as soon as feasible. I do not have a firm timeline to provide at this moment, as I need to gather more information about potential reforms and consult with FCC staff and the USF Joint Board, but I plan to work as expeditiously as possible on the matter.

2. Question by Senator Booker

I understand that on July 28, 2016, a group of managed care providers petitioned the FCC seeking declaratory ruling and/or clarification of the TCPA to reconcile the regulation of a health plan member's telephone number under the TCPA with the regulation of the same use under the Health Insurance Portability and Accountability Act ("HIPAA").

The Petitioners argue that a clarification is necessary to harmonize the TCPA, HIPAA, and prior Commission rulings to protect member health care communications. The calls covered by these clarifications fall within categories recognized by the Department of Health and Human Services as covered by HIPAA to enhance the individual's access to quality health care. HIPAA, as you

know, regulates the privacy practices of covered entities and expressly encourages and permits such calls to be made. Congress passed HIPAA in 1996 and the HITECH Act in 2009, well after the TCPA, which was enacted in 1991. HIPAA and the HITECH Act, therefore, represent the more recent intent of Congress in regulating these specific types of communications.

What is the Commission's view on protecting non-telemarketing calls allowed under HIPAA in light of their unique value to and acceptance by consumers?

Speaking only for myself, I am sympathetic to the unfortunate quandary faced by health care companies that must comply with competing statutes while also trying to provide the best overall care to patients. Unfortunately, the Commission has pursued an extensive (and misguided) reading of TCPA that has harmed the ability of health care companies – and many other legitimate industries – to serve their customers. I would be supportive of an overall effort to exempt these types of calls from TCPA.

What is the Commission's view on acting to protect these calls expeditiously so that beneficiaries' access to health care is not jeopardized, rather than waiting for a larger "omnibus" TCPA ruling that could take much longer?

I would be supportive of efforts to move smaller items in quick order. The FCC Chairman, however, is in the best position to answer questions on the timing of moving such protections and whether to do so individually or collectively.

3. Questions by Senator Tom Udall

At a September 15, 2016 hearing of this Committee, you pledged to me that you would work with then Chairman Tom Wheeler to take action by the end of the year to help address the digital divide on tribal lands. The New Mexico Congressional delegation wrote you on January 9, 2017 to urge swift action on a tribal broadband item circulated by Chairman Wheeler on December 15, 2016 that has not been acted on. Why have you not responded to our letter?

If there was any miscommunication or if I erred in not personally responding to the New Mexico Congressional delegation, I offer my sincere apology. I have great reverence for the Congress and believe it is my obligation to answer any specific issues, questions or concerns you have to the best of my ability. In this instance, it appears that similar letters were sent to the Chairman and Commissioners, in which case it is common practice to allow the Chairman to respond. To the extent that you were seeking my independent views, I did not realize this.

Substantively, I remain committed to working on bringing broadband access to all Americans that wish to have it, including those on tribal lands. Former Chairman Wheeler's draft item raised a host of critical issues and problems that were not sufficiently addressed prior to his departure. As you note, Chairman Pai has since circulated his own proposal for the Commission's consideration.

FCC Chairman Pai wrote me on March 7th that he circulated an order that "would assist carriers serving Tribal lands in deploying, upgrading, and maintaining modem high-speed networks." The order would also "allow carriers serving Tribal lands a greater ability to recover operating expenses, thus improving the financial viability of operating a broadband network serving Tribal lands." Will you support this order?

I am in the process of reviewing the text of the item and have sought to get a full and accurate picture of the effect that the policies will have on potential beneficiaries in order to render the best decision possible. This process has raised a number of further questions regarding expenses incurred by some of the applicable companies. In order to be good stewards of the funding provided by American consumers, I want these questions answered before casting my vote. On a more fundamental note, I am not sure that exempting certain companies providing service on tribal lands from our operating expense limits is the best way to increase broadband availability to these areas, which is the primary concern and objective.

Do you believe the media is the "enemy" of the American people?

No. However, having worked on public policy matters in Washington D.C., for over two and a half decades, I believe that a number of media outlets maintain biases that were and remain reflected in their reporting to the detriment of projects and views of my former employers or myself. Thankfully, the communications beat tends to avoid many larger politically-charged issues.

Senate Committee on Appropriations
Subcommittee on Financial Services and General Government
Questions for Michael O'Rielly, Federal Communications Commission
June 20, 2017 Hearing

Senator Shelley Capito

1. Commissioner O'Rielly, you previously stated that there are bad actors who may take advantage of broadband deployment, particularly those that seek to deploy 5G wireless service. What steps is the Commission taking to prevent this from occurring?

The Commission has initiated a multi-pronged approach to eliminate and minimize roadblocks to broadband deployment. For instance, earlier this year Chairman Pai established a new advisory committee, aptly named the Broadband Deployment Advisory Committee, consisting of experts tasked with examining ways to remove barriers to deployment. Further, the Commission has issued a (1) Public Notice on streamlining small cell wireless deployment (2016), (2) a broader Notice of Proposed Rulemaking and Notice of Inquiry pertaining to wireless issues (2017), and (3) a Notice of Proposed Rulemaking, Notice of Inquiry and Request for Comment pertaining to wireline services (2017). These efforts are intended, in part, to solicit steps and requisite authority the Commission can exercise to eradicate barriers. I am hopeful that these items will conclude in the very near future and providers can focus on bringing service to all Americans, instead of being smothered by unnecessary red tape and/or excessive payments to some state, local or tribal governments.

Senator Jerry Moran

1. I understand the next generation of wireless network infrastructure will be built using small-cell networks employing 5G wireless technology. The faster data speeds and improved connectivity of 5G is essential for the Internet of Things (IoT) which will unleash billions of dollars in economic growth. The U.S. is the world leader in 4G, but I am worried we are not taking the necessary steps to maintain our global leadership to deploy 5G. Carriers tell me the regulatory barriers to deploy small-cell networks are outdated, hampering investment and economic growth. Do you agree 5G deployment is critical for the American economy, and if so, what steps is the FCC taking to eliminate barriers and costs to deploying 5G technology in a timely manner?

Yes. Too many state, local and tribal governments are acting in bad faith, by imposing unreasonable approval procedures or seeking to extract excessive compensation, preventing or delaying the deployment of small cell networks. I strongly believe that the Commission must be willing to step in to aggressively use authority provided by Congress to preempt these regulatory barriers. In addition, the Chairman has established a new Commission advisory committee to examine these and other issues and make recommendations for further Commission action. I am hopeful that the advisory committee's work will be fruitful for its intended purposes.

2. I continue to hear from Kansans who remain concerned about the status and effectiveness of the Universal Service Fund's (USF's) High-Cost program. In April, I joined a number of my

colleagues in a letter to the FCC strongly encouraging you to take immediate steps to ensure sufficient resources are available to enable this program to work as statutorily mandated.

a. I hear that the budget shortfall is resulting in canceled network builds and undermining the intended effect of the reforms to make standalone broadband affordable for consumers. Are you hearing this too, and what steps are you taking to address this?

Yes, I have heard this is occurring. I support providing some additional funding resources to both the model and legacy sides for rate of return carriers. The Commission should promptly examine whether this can be done without increasing the burden on consumers, by using funding from our reserves without jeopardizing funding for other purposes.

b. Some have talked about an infrastructure package from Congress as a potential solution for this USF budget shortfall. If Congress does come forward with such funding, would you commit to adequately funding the program for these small, rural carriers?

If Congress decides to allocate federal taxpayer dollars for broadband deployment and if such funding is allocated to the FCC for distribution via our high-cost program, which I have advocated would be the best mechanism, I would certainly commit to ensuring that the funds are properly distributed to extend broadband deployment nationwide. Depending on how the funding is designated by Congress, I would agree that additional targeted funding should go to carriers willing to serve parts of America that lack broadband service, which tend to be the more rural areas.

3. I believe that modernizing the federal government's information technology (IT) systems needs to remain a top-priority for all agencies. According to the GAO's 2015 High Risk Series report, the federal government annually spends over $80 billion on IT, but more than 75 percent of this spending is for "legacy IT". I have worked with my colleague Senator Udall on legislation called the Modernizing Government Technology (MGT) Act of 2017 in an effort to replace "legacy IT" systems that continue to plague numerous federal agencies. With examples like the reported cyberattack on the FCC's Electronic Comment Filing System, I think that this effort needs to remain a priority.

   Could you please speak to the cybersecurity benefits resulting from the FCC's current and ongoing efforts to replace "legacy IT" systems?

I may not be in the best position to comment on this, as it is an area generally overseen by the Chairman. In terms of replacing legacy IT systems, I wholeheartedly agree that modernizing our physical equipment, networks and databases is a sound investment, assuming funding is available to do so, and would tend to improve the security of our internal network from any threats.

4. Your testimony discussed the FCC's ongoing efforts to close the "Digital Divide" by expanding fixed and mobile broadband deployment in the Connect America Fund Phase II

and the Mobility Fund Phase II. What role do you see the Rural Broadband Auctions Task Force playing in implementing these important USF-related auctions?

As I understand from conversations with the Chairman's staff, the task force is charged with designing and executing the respective reverse auctions for high-cost program funds, in compliance with decisions made by the Commission. While these functions previously existed, the Chairman felt it was important to ensure that the necessary focus and attention was paid to this important topic via a dedicated task force of Commission staff.

5. Title II and "Open Internet" rules are not the same and should not be conflated. If people are worried about Open Internet issues, shouldn't Congress act to put "Open Internet" rules into statute and thus end the regulatory ping pong and market uncertainty that results every time the Administration changes parties and a new FCC Chairman steps into this issue?

The Commission currently has an open proceeding on the matter and I am committed to reviewing the record as it develops, so I will withhold lengthy commentary at this point. However, I can state that I firmly believe that the only way to ensure lasting peace on the issue of net neutrality is for Congress to enact requisite legislation on the topic, as it deems appropriate. Absent this action, changes to rules are likely to occur as Commissioners change over time.

Senator Joe Manchin

1. The Commission's budget proposes to require the auction of additional spectrum by 2027. I strongly support the continued focus on making more spectrum available for commercial use. Federal communications policy both embraces and requires that rural Americans must have access to the economic opportunities provided by broadband access. Innovative ideas are not limited by geography. We must do more to ensure they are not limited by a lack of connectivity.

   How can future auctions be structured to ensure additional wireless spectrum deployment in rural areas actually occurs?

I believe the best way to facilitate wireless coverage to all areas is to have firm build-out requirements that are enforced vigorously. That being said, I do not support making retroactive changes to existing licenses for this purpose, as it would unfairly impose burdens on those licensees who purchased licenses under rules previously designed. Instead, any such reform should be done on a going forward basis.

2. Broadband has an important role to play in providing access to healthcare services, particularly in rural America. I commend the Commission's work through the Connect2Health Task Force to provide valuable insight intro broadband health policies. Most fundamentally, telehealth services are only an option for those who have a broadband connection. I strongly support the Commission's focus on closing the digital divide through programs such as Mobility Fund II, which has the potential to be a critical part of the broadband expansion necessary for telehealth in rural areas.

Beyond connectivity, would you please discuss what barriers to telehealth services currently exist at the state level?

While Congress has assigned a limited role for the Commission in regard to telehealth, I am familiar with these issues from my previous employment. Certainly, the issues of licensing and liability have been roadblocks to further use of telehealth, requiring greater attention and possible action by Congress or individual states. However, the Commission recently released a Public Notice seeking additional information and answers to questions regarding a host of aspects involving telehealth and whether the Commission can play a role in facilitating its usage, within the bounds of our authority.

3. I understand the Commission opened a proceeding in April to explore barriers to wireline broadband infrastructure deployment. I applaud the Commission's continued focus on rural broadband deployment. Under current law, most providers generally have a duty to allow other providers access to its broadband infrastructure like conduit. However, because broadband conduit cannot be visibly inspected, it has been brought to my attention that providers have had difficulty finding out where it is already in the ground. In turn, this can hinder broadband deployment.

   Can ensuring greater access to conduit may make financial sense for providers as well as help close the digital divide?

In terms of duty to offer access to conduit, different legal requirements may apply depending on the type of provider and the service being offered. For instance, section 251(b)(4) of the Communications Act of 1934 imposes the obligation on each local exchange carrier "to afford access to the poles, ducts, conduits, and rights-of-way of such carrier to competing providers of telecommunications services on rates, terms and conditions that are consistent with section 224" (pertaining to pole attachments). As you note, the Commission has initiated a proceeding, and one of the points it is considering is the scope of any such requirements.

The Commission is also broadly considering whether barriers to wireline investment can be eliminated or modified to facilitate broadband deployment. The record on the that item has since closed and it is now before the Commission to determine the best course of action, if any. I plan to review the record closely to see the answers commenters provided to the many questions and proposals posed.

Generally, greater access to existing conduit, consistent with obligations under the law, may be helpful to broadband deployment, depending on the remedial structure and costs. Certainly, any efforts on this front shouldn't serve directly or indirectly as an incentive not to deploy broadband facilities.

Senator Chris Van Hollen

1. Chairman Pai: In May you met with local and state MD officials on the issue of microcells. At that meeting, Montgomery County Executive Leggett underscored the importance of working with local authorities. Maryland is a unique state because we have very dense urban

communities and rural and mountainous areas--we are a microcosm of the challenges of nationwide broadband deployment. I am very excited about the expansion 5G next generation networks. However, local governments feel that they are being left out of the conversation.

a. Commissioner Pai and Commissioner O'Rielly: You have both spoken numerous times about federal overreach and over regulation. What steps will you take to ensure that local jurisdictions are heard and that your actions do not preempt their regulations?

I believe that a good portion of state, local and tribal governments want their citizens to have the opportunity to obtain broadband services and the benefits that can come from such technology. However, a number of bad actors remain that delay the approval process for necessary deployment through various means or seek to extract exorbitant payments from broadband providers. Moreover, there are some governmental entities that prevent deployment based on reasons that are not under their purview. Accordingly, I believe that the Commission must exercise authority provided by Congress to preempt these instances.

b. Do you think federally regulated expansion will encourage the private sector to invest profits into areas that are less profitable to serve—such as rural areas?

The development and deployment of new technologies, such as fixed wireless broadband and satellite offerings, is likely to decrease the cost to serve many of the hardest to reach areas, although there may still be areas where it is cost prohibitive to offer services. Accordingly, the Commission operates its high-cost program to provide a subsidy mechanism to entice providers to serve areas where there is no business case at the current time. In terms of removing barriers to entry, I do believe that this can reduce the cost of service or lead to greater network expansion.

c. Do you agree that the private industry and local governments are working to create innovative solutions regarding microcells?

In many instances, the current regulatory landscape hampers the deployment of broadband. Therefore, I applaud efforts by state, local and tribal governments to find creative ways to expedite deployment and minimize the cost for siting new wireless technologies, including small cells. I do worry, however, that the patchwork of differing regulations and costs can act as an additional deployment barrier.

Response to Written Questions Submitted by Hon.
John Thune
Written Questions for the Record to
Commissioner O'Rielly

Question 1. Please describe actions the FCC has taken to meet its statutory obligations in regards to the T-band.

As you know, the Middle Class Tax Relief and Job Creation Act of 2012 (Public Law 112-96) required the Commission to reallocate and reauction the spectrum in the 470-512 MHz band, commonly referred to as the T-Band, within nine years of enactment. This means that far in advance of February 22, 2021, the FCC must take steps to begin the auction and relocation process. Consistent with passage of the Act in February 2012, I pushed the Commission to cease processing applications for new or expanded T-Band operation and issue a Public Notice seeking information on how to enact the statutory requirement, which it did. Unless the law is modified or eliminated, I support the Commission taking the next steps expeditiously in this matter.

Response to Written Questions Submitted by Hon.
Roy Blunt
Written Questions for the Record to
Commissioner O'Rielly

Question 1. In your dissent to the 2015 TCPA Omnibus Declaratory Ruling, you expressed your disappointment with the Commission's decision, and discussed the need to balance consumer protection with that of businesses trying to contact their consumers for a legitimate business purpose. I agree with this approach along with six of my colleagues, which we vocalized in a letter sent to the FCC on July 24. Is the FCC planning to ensure the appropriate balance is achieved between these two interests when answering the TCPA questions set before it?

I certainly hope that the Commission will achieve this balance and will advocate internally to my colleagues for such an approach. As your letter eloquently highlighted, "The FCC's past interpretations of the TCPA have resulted in uncertainty about how those calling in good faith can comply with FCC regulations, making it more difficult for consumers to receive communications they want and need. This chills legitimate communications and leads to increasing class action litigation that often does little to help consumers."

In fact, as you mention above, I raised similar concerns in my dissent. Specifically, I stated that any claim that the order protected Americans is a farce and highlighted that, in its overreach, the order would penalize legitimate businesses and institutions acting in good faith to reach their customers using modern technologies. Therefore, I was pleased that the D.C. Circuit struck down the 2015 TCPA Omnibus Declaratory Ruling, providing the Commission with the opportunity to rethink its prior decision.

Response to Written Questions Submitted by Hon.
Jerry Moran
Written Questions for the Record to
Commissioner O'Rielly

Question 1. The MOBILE NOW Act, which was signed into law as part of the most recent omnibus package, called for the FCC and NTIA to identify 100 megahertz of new unlicensed spectrum while also requiring the creation of a "National Plan for Unlicensed Spectrum." What steps will the Commission take to free up much-needed unlicensed spectrum to support growing consumer demand for existing technologies and to provide innovation space for the technologies of the future? How are you coordinating with NTIA?

In July, the Commission initiated a proceeding to reallocate spectrum in the 3.7 to 4.2 GHz band, or C-band downlink, for licensed use. As the Commission considers this proceeding, the overall plan must also permit unlicensed use of the C-band uplink spectrum, or 6 GHz band. As Chairman Thune recently noted to the Commission, the 6 GHz band is a necessary ingredient to address the need for more unlicensed spectrum. This spectrum, along with the potential opening of the 5.9 GHz band and combined with the existing 5 GHz band, will provide the unlicensed community with access to a significant swath of spectrum, creating wide channels for Gigabit services. Moreover, in March, the Commission issued a notice to contemplate whether underutilized spectrum in the 4.9 GHz band – in close proximity to the 5 GHz band – should be allocated for unlicensed use, what the technical rules should be, and how the Commission should deal with the incumbents. Taken together, I believe that these actions will enable us to meet our statutory obligations under the MOBILE NOW Act.

Question 2. This committee worked hard to ensure that adequate funding for the broadcast channel repack in the omnibus this past March, including money for impacted FM radio stations and Low Power TV and Translators. Next month, phase one of the repack moves begin. What process does the Commission have in place to ensure that, if a broadcaster being moved to a different channel is unable to meet their phased move deadline, through no fault of their own, that they will not be moved off of their current channel?

I have repeatedly stated that if a broadcaster being moved to a different channel is unable to meet their phased move deadline, through no fault of their own, I would support modifications to that broadcaster's deadline in order to ensure that no broadcaster is forced off the air. I have been in constant communication with both the industry and the Media Bureau, regarding the progress of Phase 0 and any anticipated complications or slowdowns as we move forward. Throughout these conversations, it has been clear that affected broadcasters and the FCC are methodically working through the ten phases of the repack. Most experts are not anticipating huge problems until at least phase three, but I'll be following closely the experiences stations are having with the repack and what issues may be on the horizon. For instance, I was one of the first to raise awareness of the potential shortage of tower crews that could cause relocation delays.

Response to Written Questions Submitted by Hon.
Shelley Moore Capito
Written Questions for the Record to
Commissioner O'Rielly

Question 1. In many rural communities, students have long commutes on school buses sometimes upwards of half an hour, an hour, or even longer one-way. Given the connectivity challenges many students face in rural communities, how could E-rate help connect school buses with wifi to allow students to use commute time to do homework, projects, or other school work?

The FCC's Universal Service Fund programs—which are authorized pursuant to Section 254 of the Communications Act—have served to help connect consumers and communities that would not otherwise have access to modern communications networks. Accordingly, it is not surprising to see a desire to expand their scope to other aspects of our increasingly connected lives. At the same time, there are certain statutory, fiscal, and practical limits on this agency's mission that keep us from engaging in certain initiatives, no matter how compelling a particular idea may be. Of course, as I have stated on multiple occasions, any time Congress provides the Commission with clear direction via the passage of legislation, I will implement it as required. In this case, absent new statutory requirements, the Commission currently lacks legal authority to fund such projects under the E-Rate program.

FCC Oversight Hearing
Senator Cantwell
Questions for the Record

Question 1. Your agency has been tasked with commencing a study of broadband deployment and access on tribal lands by March 2019. The agency has been criticized in the past for having less than robust compliance with the need for tribe consultation. How can we optimize the tribes' participation in the broadband study and the composition of the report?

My door remains open to any stakeholder who would like to weigh in on any proceeding at the agency, and I have met with tribal representatives on numerous occasions, both at the Commission and while traveling throughout our nation. I am committed to improving tribal broadband connectivity, and the Commission should discuss policy changes and seek to gain accurate information from tribes regarding the state of communications on tribal lands. At the same time, consultation does not require tribal approval or provide tribal representatives a veto over Commission actions. To facilitate the most accurate and helpful report in 2019, the Commission should seek a dialogue with tribal representatives to obtain necessary information. However, such a process should not be seen as a means to acquiesce to whatever policy changes tribal representatives are seeking.

Question 2. Do you think it's important that the upcoming quadrennial review to review the changes that have been made to media ownership over the past 18 months and the impact that these changes have had on localism, media concentration and diversity?

Section 202(h) of the Telecommunications Act of 1996 requires that the Commission review its rules on broadcast ownership every four years to "determine whether any of such rules are necessary in the public interest as the result of competition," and "shall repeal or modify any regulation it determines to be no longer in the public interest." As statutorily required, we should review all of our remaining media ownership rules, and whether they make sense in the current media marketplace. The law is specific in its focus on existing rules and not those that have been eliminated already.

For instance, in November, the Commission found that some of our rules, including the Newspaper/Broadcast Cross-Ownership ("NBCO") rule, was not necessary to promote competition, localism, or ensure viewpoint diversity. In February, the Third Circuit Court of Appeals denied a mandamus petition challenging our order, allowing our revised rules to go into effect. Unfortunately, I believe the repeal of the NBCO rule happened 15 years too late, and, as we approach the 2018 Quadrennial Review, I hope that we can make more changes so that our rules will truly reflect the modern media marketplace that the Third Circuit recognized as early as 2004.

Question 3. In 2016, the Court of Appeals chastised the FCC for making changes to media ownership rules without the benefit of having completed statutorily mandated reviews of the media marketplace and media ownership rules that were required in 2010 and 2014. Basically

the court was saying that the FCC's policy making needed to be based on data and analysis. It's my understanding that the FCC needs to start its next data gathering review this year.

Given the court's guidance that any FCC changes to media ownership rules should be grounded in the type of up-to-date data and analysis required by the quadrennial review process, what you would recommend that the next Quadrennial review cover?

While I have expressed concerns with the Third Circuit's reasoning in this set of cases, I agree that the Commission's efforts on the 2010/2014 Quadrennial Review were shoddy at best, ignoring the record and marketplace data to indefensibly maintain rules that should have been dismissed years ago. Consider that prior to Commission action, the Third Circuit admonished the FCC for its delay in our review and specifically highlighted the NBCO rule, stating that "the 1975 ban remains in effect to this day even though the FCC determined more than a decade ago that it is no longer in the public interest."[1] When the Commission finally did act, it examined the full media landscape then did nothing to adjust our rules in response to that landscape. In fact, despite having the votes to eliminate the cross-ownership rules, the Commission ignored precedent, consensus, and the record before it and in an about-face, decided to maintain the NBCO rule.

For the next Quadrennial Review, I hope that we can more honestly define the media market as it exists today. For instance, while our November Order acknowledged that the video marketplace has substantially evolved, the Commission declined to expand its market definition beyond local broadcast television stations. I believe there is ample evidence that cable operators, over-the-top providers, Internet sites, and social media platforms compete with local broadcasters.

Further, I hope the 2018 Quadrennial Review will more fully review each and every aspect of our Broadcast Ownership Rules. For starters, it's time to review the Commission's AM/FM subcaps. Additionally, I have long called for a reexamination of the duopoly rule. In many markets, duopolies or triopolies could strengthen the overall state of broadcasters and allow stations to concentrate more resources on bringing more and higher quality local content and news to their viewers. In November, the Commission rightfully eliminated the "eight voices test," which made even less sense in 2017 than it did in 2002 when the Commission first sought to eliminate it. As to the relaxation of the top-four restriction, I would have preferred for relief to be provided through bright-line rules rather than relying on staff-driven case-by-case waiver assessments. I trust that as we re-examine this issue, as well as its possible elimination altogether, as part of the 2018 Quadrennial Review we will give serious weight to a full elimination of the duopoly rule.

Question 4. When I asked Chairman Pai at the hearing if the FCC has the authority to address cybersecurity threats, he said that the FCC currently lacks the authority. In your view, which federal agency, if any, is the lead agency on cybersecurity issues, such as SS7, impacting wireless telephone networks?

[1] *Prometheus Radio Project v. FCC*, 824 F.3d 33, 50 (3d Cir. 2016) (*Prometheus III*).

I agree with Chairman Pai that current law provides the Commission with little authority over Internet or communications network security. I have written about, given speeches, testified before Congress, and spoken publicly on that exact point. Cybersecurity is certainly and rightly a policy area that requires a significant amount of attention. Accordingly, it seems that everyone wants to be involved. The Senate Homeland Security and Governmental Affairs Committee held a hearing on this very topic last year, finding that duplicative cyber regulations imposed by various federal agencies have taken industry's attention away from securing their networks and towards a compliance, check-the-box regime.[2] That is why Congress assigned responsibility over these issues to the Department of Homeland Security. It is detrimental for any agency or department to try to insert itself into an area under another's jurisdiction. Of course, if Congress passes a statute providing the Commission with authority over this issue, I will fully implement any new authority given to the Commission.

Question 5. The FCC has publicly encouraged wireless carriers to voluntarily address cybersecurity issues related to SS7 that impact their networks. Does the FCC currently have the authority to require wireless carriers to address cybersecurity issues related to SS7? If not, please explain why.

No. Those that suggest the Commission has authority in this space point to specious readings of the law, such as Section 1 of the Communications Act of 1934 providing some universal authority over all communications activity, especially cybersecurity. However, the plain reading of Section 1 clearly shows that it serves as a preamble to justify the creation of the FCC. It sets the stage for Congress moving away from the Federal Radio Commission and to the "modern" Commission and serves as a policy statement, not actual authority. I would be troubled to try to read cybersecurity within any other provisions in our current statutory authority.

Question 6. According to a recent article in the Washington Post, governments in other countries, including the United Kingdom, have "commissioned independent testing of the vulnerabilities in national cellular networks." Does the FCC currently have the authority to commission independent cybersecurity testing of U.S. wireless networks? If not, please explain why.

No. While I can't speak to the regulatory authority provided to foreign regulatory bodies, the Commission's authority in this space is limited. Instead, the Commission relies on its advisory committees to be kept up to speed on pertinent topics and a partnership with the Department of Homeland Security in its exercise of pertinent authority.

Question 7. Does the FCC currently have the authority to require mobile carriers to assess risks relating to the security of mobile network infrastructure as it impacts the Government's use of mobile devices? If not, please explain why.

[2] U.S. Senate Homeland Security and Governmental Affairs Committee, "Cybersecurity Regulation Harmonization" (June 21, 2017), https://www.hsgac.senate.gov/hearings/cybersecurity-regulation-harmonization.

Government entities, through their procurement processes, can always seek to require mobile carriers to provide certain levels of services in order to receive their business. However, that would probably be done individually by such government entities, rather than by the FCC.

Question 8. Does the FCC currently have the authority to compel mobile carrier network owners/operators to provide information to the FCC to assess the security of the carriers' communications networks? If not, please explain why.

The Commission engages in various information collection processes with mobile carrier network owners/operators to provide statutorily mandated reports to Congress. However, I am not familiar with any required report that would permit us to compel mobile carrier network owners/operators to provide information to the FCC to assess the security of the carriers' communications networks.

Question 9. A recent investigation by Senator Wyden revealed that wireless carriers were providing customer location to private companies without verifying that users had consented to this disclosure of private information. In response, all of the major wireless carriers announced they would stop selling location data via location aggregators.

I am aware of the recent release of certain consumer location data by a company, Securus, that collects this data, upon receiving consent from the wireless subscriber, as part of its prison payphone offering. It is my understanding that the wireless carriers provided the location information to an aggregator, LocationSmart, which then provided the information to Securus. This is an issue that I am following, and I am in the process of obtaining the facts so that I understand exactly what consent was received from subscribers, how this data was collected, and what led to the disclosure of this information. It is also my understanding that the Commission has opened an investigation into these events. One of the issues that will need to be considered is whether we have authority over the specific facts presented in this case. I do not want to prejudge an issue that is likely to come before me in the coming months, but I am happy to work with you and your staff as we continue to consider this matter.

Question 10. Is location data is protected by 47 U.S.C. § 222, regardless of whether it is collected when the subscriber is making a call, browsing the web from their smartphone, or even when the subscriber's phone is not being used and is in the subscriber's pocket? If not, please explain why.

As I stated in my previous answer, the Commission is currently looking into this very issue, and I will reserve judgement until I have all of the facts and am able to perform a thorough statutory analysis. To my knowledge, the Commission has not addressed this issue before, and I expect that, while I do not have insight into the parameters of the staff investigation, this is one of the issues that the Commission will be exploring.

Question 11. Has the Commission responded to the Third Circuit mandate in the Prometheus Radio Project v. FCC line of cases to examine the impacts of broadcast consolidation on ownership opportunities for women and people of color?

Yes, it is my understanding that appropriate paperwork was filed with the court in this matter. Chairman Pai deserves much credit for bringing to order an incubator program last month. The number of women-owned and -controlled broadcast stations and the number of African-American-owned and -controlled stations in the United States is abysmally low. As I stated at a Congressional hearing last October, the situation we have today is a result of our media ownership rules, and those rules have not worked. We must try something new. With our new Incubator Program, the Commission does just that. I truly hope that this program is a success and the court review will validate this approach.

Question 12. Does the Commission intend to collect any data so that it can examine how and whether broadcast consolidation relates to ownership diversity?

I am not aware of the Chairman's exact plans for the 2018 Quadrennial Review, so I cannot speak with authority to this question.

Question 13. What percentage of broadcast stations are owned by people of color? By women? Are you satisfied with those levels? If not, what kind of meaningful changes can the FCC make to expand ownership diversity?

According to the Commission's most recent report on the ownership of commercial broadcast stations, women collectively or individually held a majority of the voting interests in 102 full-power commercial television stations, or 7.4 percent. African Americans fared even worse, holding collectively or individually a majority of the voting interest in 12 full-power commercial television stations, or 0.9 percent. Importantly, these are statistics that resulted under the FCC's archaic media ownership rules, which we took an important step to modernize in November. I truly believe that updating our rules to reflect the actual marketplace will allow broadcasters to fully compete in the dynamic marketplace and thrive in many instances. Congress shared this sentiment when it passed the Telecommunications Act of 1996, which included Section 202(h) that required the Commission to review its rules on broadcast ownership every four years in order to "determine whether any of such rules are necessary in the public interest as the result of competition" and to "repeal or modify any regulation it determines to be no longer in the public interest."[3] As I have previously stated, the situation we have today is a byproduct of decades old rules, and those rules have not worked. We must try something new.

Question 14. What data, if any, did the Commission rely on to justify its recent assumptions that deregulation in the form of loosening local ownership protections would improve competition and localism in the broadcast market?

[3] Telecommunications Act of 1996, Pub. L. No. 104-104, § 202(h), 110 Stat. 56, 111-12 (1996).

Each time the Commission takes action, it relies on the record to support our decisions. While there are many actions we have taken in the broadcasting space, I will focus my answer on the NBCO rule as an example of our analysis. More than a decade ago, the Third Circuit found that the FCC "reasonably concluded" that the NBCO rule was not necessary to promote competition or localism[4] and in our November order we fully addressed why it was not needed to ensure viewpoint diversity. According to Pew, "Americans turn to a wide range of platforms to get local news and information."[5] The Third Circuit recognized this multiplicity of voices, including cable and Internet, in 2004. It simply disagreed with the Commission on the degree to which these services competed with local newspapers. But, something else happened in 2004: a social media platform known as Facebook launched, followed by Twitter in 2006. These social media platforms, along with Google, became go-to sites that many consumers visit to first learn about breaking national or local news. More than a decade later, it is hard to overstate the impact of social media platforms and online outlets on viewpoint diversity.

Question 15. Does the FCC have any intention of soliciting public input with field hearings regarding whether or not local broadcast stations are serving the public interest to inform evaluations of recent media ownership changes or future ownership reviews?

I am not aware of the Chairman's plans for the 2018 Quadrennial Review, so I cannot speak with authority to this question. However, I have found that past field hearings have offered little additional value to the record.

Question 16. Notwithstanding any recent legislation, in your opinion, which part of the federal government should maintain responsibility for updating and maintaining the broadband map? What is the basis for your answer?

It is critical that policymakers and the public understand where broadband coverage is available throughout America, and I believe that the FCC is well-suited to update and maintain our broadband maps. But to engage in an effective mapping effort, we must make a determination on the appropriate level of granularity for the underlying data, and evaluate the costs of and our mandate for producing more specific maps. This notwithstanding, the Commission has taken actions during my tenure to improve the broadband data reporting requirements, allowing for more accurate maps.

Question 17. What is your view on whether the federal agency should use or rely on the data sets of private companies to fill out the broadband map?

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[4] *Prometheus Radio Project v. FCC*, 373 F.3d 400–01 (3d Cir. 2004) (*Prometheus I*).

[5] Pew Research Center and Knight Foundation, How People Learn About Their Local Community 1 (Sept. 26, 2011) (How People Learn About Their Local Community), http://www.pewinternet.org/2011/09/26/how-people-learn-about-their-local-community.

The Commission should rely on a multitude of sources to provide reliable and accurate data in order to produce the best broadband maps possible. That being said, the Commission's previous data collection processes have had shortcomings, producing a great deal of inconsistencies in companies' submissions. The Commission is currently working on modifying our data forms in order to ensure that the information provided is helpful, consistent, and paints a more accurate picture of broadband deployment.

FCC Oversight Hearing
Senator Schatz
Questions for the Record

USF Contribution Methodology Reform

1. At the hearing you testified that contribution methodology reform "has been stuck for quite a while" because a proposal by the state members of the Federal-State Joint Board on Universal Service is not "viable amongst the members" of the full board. Explain specifically what the state members' plan proposes and why you think it is not viable?

The heart of the proposal by State representatives to the Federal-State Joint Board has been to expand the contribution base by requiring broadband companies – and ultimately their consumers – to pay new fees to support USF. I have long opposed the idea of imposing fees on broadband. Fundamentally, taxing broadband deters its adoption and use. Congress, the Commission, and certain consumer groups have recognized this on multiple occasions in the past.

It is also wrong to assume that assessing broadband will cause the current contribution factor to drop dramatically, resulting in lower fees for consumers. Broadening the base may reduce the fees on currently assessed services, but new fees will be applied to more parts of the same consumers' bills. In other words, it would just spread the pain in the hopes that people will not notice or care enough to object. Moreover, the notion that broadening the base would result in a lower contribution factor assumes that spending remains constant, which is unlikely given the recent interest in increasing overall spending.

2. What other proposals have been put forward by you or any other Joint Board members? How many meetings did the Joint Board hold to discuss the state members' proposal? How many times has the Joint Board met this year and last year to discuss contribution methodology reform, and when was the last meeting? Has the plan submitted by the state members been put to a formal vote by the Joint Board and rejected by a majority of the members? If it has not been put to a vote, why not?

Over the years, the Commission and, specifically, the Joint Board, have explored numerous options to replace the current methodology. I can't speak to Joint Boards overseen by other Commissioners, but I have had numerous conversations with the state representatives on their proposal, including a formal meeting held in San Diego. The state proposal has not been presented before the Joint Board for a vote because a majority of FCC members vehemently oppose capturing broadband in the contribution methodology. I believe such action would be extremely harmful, and we are under no obligation to vote on a proposal from the Joint Board that is doomed for failure when it comes to the Commission.

FCC Oversight Hearing
Senator Markey
Questions for the Record

The Commission is currently considering a forbearance petition to limit protections ensuring incumbent Local Exchange Carriers provide competing telecommunications carriers access to their networks at reasonable rates, terms, and conditions if there is not sufficient competition in the market. Will the Commission take into consideration the special circumstances of how Hurricane Maria devastated the local telecommunications infrastructure as it considers this proposal?

Without prejudging the petition before the Commission, I think it is fair to say that I have always supported a robust record in order to make the best decision possible. To the extent parties submit relevant information, I will give it appropriate consideration.

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
"Oversight of the Federal Communications Commissions"
Senator Udall Questions for the Record

Question 1: What is your view on what a meaningful tribal consultation should look like?

My door remains open to any stakeholder who would like to weigh in on any proceeding at the agency, and I have met on numerous occasions with tribal representatives, both at the Commission and while traveling throughout our nation. Tribal consultation means just that: The Commission should discuss policy changes and seek to gain accurate information from tribes regarding the state of communications on tribal lands. Consultation does not *require* tribal approval or provide tribal representatives a veto over Commission actions.

Committee on Commerce, Science, and Transportation
"Oversight of the Federal Communications Commission"
Thursday, August 23, 2018

Questions for the Record
Senator Margaret Wood Hassan

Question 1. It is my understanding that Commissioner Rosenworcel worked to include maternal health issues in the recently passed Notice of Inquiry on the FCC's proposed telehealth pilot program. Given that the inclusion of maternal health issues is critical for rural women and their families, will you commit to maintaining them, if this program moves forward?

In August, the Commission launched a Notice of Inquiry (NOI), led by Commissioner Carr, on a pilot program to examine whether to expand the Commission's telehealth program. Importantly, an NOI represents the very beginning of a process. As I stated at the Open meeting, as I follow the record in this proceeding, my goal is to ensure that any new program is: legally sound; coordinated both within the Universal Service Fund (USF) and with other agencies' programs to avoid duplication; cost-effective for consumers and businesses that would fund it; and accountable to the agency and the American public. The NOI raised some concerns along these lines, which I highlighted in my statement. I am pleased that Commissioner Carr got us to this point, but much work lies ahead. I will commit to rolling up my sleeves to address these matters and others, consistent with my principles, before any Notice of Proposed Rulemaking is considered. As it pertains to maternal health, I have witnessed the impact of the deterioration of access to certain women's health care in many rural parts of America and fully recognize that telehealth technologies, many of which are already in operation today to great success, can greatly improve this situation. As such, I would be in favor of including provisions related to maternal health, if the pilot project proceeds forward.

Questions for the Record from Sen. Cortez Masto
Senate Commerce Science and Transportation Committee Hearing:
"Oversight of the Federal Communications Commission"
Thursday, August 16, 2018 at 10:00pm SR253

For the Honorable Michael O'Rielly, Commissioner, Federal Communications Commission

Net Neutrality Comment Period
A recent FCC Inspector General report recently concluded, despite the FCC's repeated claims that comment period for the net neutrality repeal was the subject of a cyberattack, that it was actually just the comment system simply being overwhelmed with public outcry against the rollback of net neutrality.

Question 1. When did you first learn that the attack may not have happened?

I was not interviewed or involved in the Inspector General's (IG) investigation. I learned about the IG's findings just prior to its release on August 6, 2018.

Spectrum
As you know, spectrum will be vital part in deploying 5G. There have been a variety of pushes from industry for spectrum both for millimeter waves and mid-band spectrum below 6 GHz.

Question 1. What is the balance between mid-band spectrum and millimeter waves, and how have other countries struck that balance as they have worked to deploy 5G?

Experts agree that we need additional spectrum to meet the demands of a broad range of applications and to provide greater capacity, faster speeds, and lower latency. Next generation systems will capitalize on both new and existing licensed and unlicensed networks, utilizing low-, mid- and high-band spectrum, including millimeter wave frequencies. More than two years ago, I started focusing my attention on the mid bands, after it became apparent that a global shift in spectrum policy had occurred and the world was eyeing these frequencies as a component for 5G deployment. Thus, it became vital for the United States to have a serious mid-band play to complement our spectrum work in the low and high bands. Other nations seeking to lead on 5G have tended to focus their respective spectrum allocations on mid-bands and generally lacked a millimeter wave strategy.

Question 2. How does freeing up mid-band spectrum for 5G use impact rural access, especially with the high demand for these bands for rural areas?

The mid-band frequencies most often discussed for possible reallocation to flexible wireless use, including 5G services, are 3.55 to 3.7 GHz, 3.45 to 3.55 GHz, and 3.7 to 4.2 GHz. The first two bands are relatively unused by commercial providers because of protections afforded the Department of Defense. Thus, allowing commercial entities to use these bands under certain conditions should expand the options for providers, including those in rural areas. In fact, mid-

band spectrum is particularly attractive for rural mobile systems because it propagates farther than the millimeter waves. To the extent your question touches upon the geographic license sizes for the CBRS Priority Access Licenses (3.55 to 3.7 GHz), I have stated repeatedly that the Commission is working to make sure the license sizes work for as many entities as possible, reflecting that it is a prime spectrum for offering 5G services nationwide.

In terms of the C-band downlink (3.7 to 4.2 GHz), the most prevalent users are a handful of licensed satellite providers. In order to successfully complete the reallocation, the needs of current end users of the band will have to be addressed in one form or another.

Federal Broadband Coordination
The federal government has been involved in helping make the case for private companies to bring broadband to underserved areas for a long time. It's crucial that every federal dollar that goes to these communities is well spent, not duplicative, and gets sent out in a timely manner.

Question 1. What are some of the challenges for better coordinating federal resources and efforts to further deploy high-speed broadband?

I completely agree.

While efforts to provide new federal money towards broadband deployment are commendable, there is a potential for certain problems to arise. One such problem stems from the potential to allow certain funding to be used for fully-served or what some consider underserved areas. Regrettably, the definition of "unserved" has been formulated to include areas already having service, or already featuring multiple broadband providers. Moreover, there is a major disagreement over what should qualify as broadband for purposes of federal funding. I certainly would like for all Americans to have sufficient broadband speeds for whatever tasks they seek to accomplish. However, there is simply insufficient funding to subsidize "fiber" broadband builds, either wired or wireless, to every household nationwide–an effort that would cost hundreds of billions of dollars. Allowing different federal funding programs to have their own speed requirements greatly increases the likelihood that a tremendous effort will go to overbuilding in areas with preexisting service, including areas funded or expected to be funded by the Commission.

Fundamentally, federal funding should be targeted to addressing those 14 million-plus Americans without <u>any</u> broadband today. If not addressed statutorily, the next best option would be to ensure that program rules are written with strict prohibitions on duplication with other existing programs, alignment of speed requirements among federal programs, and a focus on the truly unserved.

Question 2. Do you consider current tools, such as working groups, sufficient to improve efforts to curb overbuilding and duplication?

Unfortunately, past experiences suggest that such efforts do not prevent inefficiencies, abuse, or misuse. For instance, coordination that consists of merely having discussions among bureaucrats is not sufficient to prevent overbuilding and duplication. While I have little doubt that added

dialogue among our three entities could be helpful, such dialogue does not solve the underlying problems that result in duplication, wasted spending, or worse. More affirmative protections are needed in law to truly prevent duplication.

Robocalls
Robocalls are one of the top complaints received by the FCC. Protecting consumers from these calls will take technological as well as enforcement efforts.

Question 1. Do you believe stronger enforcement efforts could offer further deterrence for people making illegal robocalls?

I certainly join with you and most consumers in seeking a solution that addresses the consumer problem of illegal robocalls, many of which initiate overseas. Many of these calls are intended to defraud or deceive consumers from their hard-earned income. The FCC certainly has been very active exploring different means to end such illegal practices, through both our rulemaking authority and in enforcement actions. While I believe these actions are important and should be continued, the low cost of illegal robocalls has unfortunately undermined the effectiveness of enforcement.

Question 2. Are fines enough to crack down on the worst offenders?

As I stated in my previous answer, while fines are important, it is hard to crack down on illegal robocall offenders. The cost to make such calls is cheap, and many of the bad actors are overseas, making the collection of such fines challenging. Again, while enforcement is important and necessary, fully cracking down on illegal robocalls remains a big challenge.

Nationalizing 5G
As you are aware, the Trump administration has suggested that nationalizing the 5G network could be necessary for national security.

Question 1. Do you believe that the private sector is best positioned to move forward with 5G?

Yes.

Broadband for Native Americans
Nevada is one of the nation’s leaders in school broadband thanks to E-rate modernization. Since the modernization order in 2014, we have seen 100% of our students reach the FCC's short term bandwidth goal -- this is quite the achievement in some of our very rural counties. But there is still work to be done -- in our state alone, over 3,400 Native American students still lack scalable broadband infrastructure. This year, Nevada school districts have requested E-rate funding to bring nearly $1.5 million in new fiber "special construction" to schools. Our state leaders have established an E-rate matching fund to accelerate these fiber builds as well. However, funding decisions have been delayed, leading to uncertainty.

Question 1. Can you commit to working with my office and Congress to provide certainty to e-rate funding decisions to help bring broadband to our most rural areas?

Yes, I always stand ready to work with Congress on any of our USF programs. However, it should be noted that I have raised fundamental concerns regarding such E-Rate fiber builds. Beyond being legally suspect, funding fiber construction projects has the ability to significantly undermine the competitive process and alter the competitive marketplace for such services in an area.

Child Protection Rules
The FCC has moved quickly to revise child television rules under the Children's Television Act, arguing that new modes of watching require updating the rules. In the proposed rulemaking, you propose to eliminate the requirement that broadcasters air their programming on main program streams, which would allow them to move to multicast streams. Low income kids really rely on this programming for education, so it's very important we get this right.

Question 1. Why not first issue a Notice of Inquiry, to fully examine the issue rather than move forward on such an aggressive timeline?

Both Notices of Inquiry and Notices of Proposed Rulemaking are vehicles that permit the agency to ask the necessary questions, obtain the relevant information, and fully and transparently consider all issues raised regarding any subject matter. Moreover, I respectfully disagree that the Commission has an aggressive timeline to move forward on this item. We are currently at the beginning stages of our comment period, with initial comments due on September 24 and reply comments due on October 23. This comment period of 90 days is typical, if not longer than other Commission proceedings. Once the record closes the Commission will review the record. There is no date set for determining a final path forward.

It is important for me to stress, that the launch of this rulemaking is the *beginning* of the process, not the end. That means everyone will have plenty of time to provide the requisite analysis of the proposed rule changes outlined in the NPRM before the Commission moves forward on any final decision. We can and will obtain the same data in an NPRM that we could in any NOI.

Question 2. Mutlicast streams have 10% of the viewership as a main feed, how will a move to these streams not be hugely disruptive to the current system?

As you highlighted, the NPRM considers allowing broadcasters the opportunity to move their children's programming to a multicast stream. This is an important protection for over-the-air only viewers, who do not have access to the plethora of children's programming offered from cable or over-the-top providers. To the over-the-air viewer, it should not matter if their programming is on channel 3.0 or 3.1. All that should matter is that they have access to the programming. Throughout our proceeding, the Commission intends to collect important input on how such a relocation would impact the current system. We also hope to learn who relies on "Kid Vid" programming today. According to initial studies of U.S. households, only 1.04% have children present in the home and have neither cable nor internet access. Moreover, of U.S. households, only 0.63% have children present in the home, have neither cable nor internet access, and a household income of less than $30,000 per year. This is not to suggest that this

population can or will be ignored. On the contrary, the multicasting option was designed to address these specific viewers.

Wearables/Rural Health

One exciting technology that will be enabled as we move to the internet of things and 5G is wearable technology and the possibilities for better health outcomes, including for rural Americans.

Question 1. Can you point to an example you have seen about how this technology is being deployed in a way that improves people's lives?

I have seen demonstrations of clothing that integrates wearable technologies, enabling remote data monitoring of those wearing the materials. This data is not only beneficial to improve workouts for ultra-athletes but can serve to monitor and alert those individuals who may be at risk for particular ailments, such as heart attacks. The reality is that, like all of 5G, we cannot predict with any accuracy the exciting new services wearable technologies may bring to improve the lives of Americans.

Question 2. How can Congress help assist the FCC in ensuring the deployment of this technology in the future?

Through the introduction of legislation such as the SPEED Act, STREAMLIINE Small Cell Deployment Act, the AIRWAVES Act, and Spectrum NOW Act, as well as the passage of the MOBILE NOW Act, Congress has made clear its priority to expand 5G deployment through both infrastructure reform and making additional commercial spectrum available to the private sector. I stand ready to work with the Committee on these and other bills put forward to achieve these goals.

Senator Jon Tester
Written Questions Submitted by Hon. Jon Tester to Federal Communications Commission

Question 1. I understand the FCC is working on a rule to assess whether to establish a program under which a spectrum licensee may partition and sublease the license to an unaffiliated carrier to serve a rural area. What is the status of that rule? What other steps are you taking to make sure rural carriers that want to buildout in rural America have access to Spectrum?

The Commission has long sought ideas and ways to facilitate secondary market transactions, including license partitioning and disaggregation and various leasing models, by those who may not wish to serve all of a particular license area. The Chairman is in a better position to outline the timing and status of this review.

In terms of my efforts to promote greater buildout via spectrum licenses, I believe that releasing as much spectrum as possible into the marketplace is one way to give smaller providers a greater opportunity to obtain licenses. This is why I have pushed so hard to reallocate as much mid-band and high-band spectrum for wireless flexible use, including mobile broadband. In my view, reducing scarcity, rather than limiting access, is the better course of action.

Senator Blumenthal Questions for the Record
Senate Committee on Commerce, Science, and Transportation Committee
"Oversight of the Federal Communications Commission"
August 16, 2018

Question 1. The Wall Street Journal's Editorial Board recently praised Chairman Pai's decision to challenge the Sinclair-Tribune merger, stating that "the FCC Chairman follows the law in stopping a merger." The editorial concluded by saying, "it's up to Congress to change broadcast ownership restrictions." Do you agree that only Congress has the authority to change broadcast ownership restrictions, like the national television audience reach cap?

Section 202(h) of the Telecommunications Act of 1996 requires that the Commission review its rules on broadcast ownership every four years to "determine whether any of such rules are necessary in the public interest as the result of competition," and "shall repeal or modify any regulation it determines to be no longer in the public interest." Therefore, I respectfully do not agree that only Congress has the authority to change broadcast ownership restrictions. To the contrary, the Commission is statutorily mandated to review and update these rules.

The one exception, of course, is to the national television audience reach cap. As I have stated previously, I do not believe that the Commission has the authority to modify the national audience reach cap, which also extends to eliminating the UHF discount. While the discount may no longer be technologically justified, it is up to Congress to make that determination, not the Commission. This was the clear intent of Congress, from my experience and perspective, when it partially rolled back the FCC's proposed cap increase of 45 percent in 2004.

Question 2. A December 2017 Notice of Proposed Rulemaking explores gutting one of the last few remaining rules protecting consumers from massive consolidation in media: the media ownership cap. Didn't Congress — through the Consolidated Appropriations Act of 2004 — very clearly instruct the FCC to set this cap at 39 percent? What authority would the FCC now have to change this cap?

After extensive debate and too many meetings to count, Congress enacted the relevant portions of the 2004 Consolidated Appropriations Act. The language in the law cannot be clearer from my opinion: it statutorily sets the national ownership limit and correspondingly removes it from the quadrennial review under section 202(h) of the Telecommunications Act.

While this is my interpretation, there is broad disagreement among interested parties over the Commission's authority in this space. Many qualified practitioners, for instance, make colorable arguments that my statutory interpretation is wrong. For these reasons, I believe it is time for the courts to opine on this matter. We need certainty, in a way that only the courts or Congress can provide, as to where the Commission's authority begins and ends. Therefore, I have stated that if the Commission proceeds, after a review of its record, to alter or eliminate the cap, I will support that item. That is not to suggest my position has changed, but only that I believe in getting to finality and am willing to cast a vote that will allow the Commission to take the needed step to get this to court review. Substantively, I believe the cap is not intellectually defensible and should be changed.

Senator Edward J. Markey

1) **IP-CTS and Automated Speech Recognition**

Automated speech recognition (ASR) has great promise for Internet Protocol Captioned Telephone Service (IP-CTS). However, I understand that current ASR engines vary in quality and accuracy, and I am concerned that nascent technologies might be certified for IP-CTS use without adequate testing. I believe that we need to be careful about implementing this service before it is fully ready.

Do you agree that we need to ensure ASR-only providers can handle 911 and related public safety calls before such technology is FCC approved? In your view, has the FCC done enough adequate testing of all types of ASR engines?

RESPONSE:

The Commission has made clear that providers using ASR must meet the Commission's mandatory minimum TRS standards, including the requirement to demonstrate that their services support 911 emergency calling and meet the applicable emergency call handling requirements. Should a draft Order to certify an ASR-only provider be circulated to the Commission, I will fully examine the applicable record prior to voting to grant the certification to ensure all requirements are met, including the provider's ability to meet the applicable 911 requirements.

2) **Protecting the C-Band for Public Radio**

The Public Radio Satellite System relies on C-Band frequencies to distribute news, programming, and public safety information to nearly 1,300 interconnected local public radio stations and millions of Americans across the country.

Can you assure me that any plans to transition C-Band spectrum for new wirelesses services will not impair the vital role that public radio plays in our news, educational programming, and emergency services?

RESPONSE:

Yes. From the beginning, I set forth certain principles that must be met in order to support the market-based plan to repurpose some of the C-Band spectrum for next-generation wireless services. These principles included providing a transparent process; reallocating more than 200 megahertz; and ensuring that the incumbents would be accommodated and held harmless. After the many conversations that I have had with interested parties, I believe it is possible to provide upwards of 300 or more megahertz for 5G, while still fully protecting those that currently utilize C-Band satellite services, including local public radio, in the remaining satellite portion of the band.

Senator Udall Questions for the Record
Senate Commerce
Oversight of the Federal Communications Commission
June 12, 2019

Question 1: Tribal communities continue to lag behind the rest of the country in the deployment of broadband. The GAO found that inaccuracies in FCC broadband data have led to underestimates of the magnitude of the digital divide on tribal lands. So we may not even have a clear picture as to how wide that gap really is given the current data collection regime. What changes is the FCC considering as part of its efforts to modernize FCC form 477 in order to specifically address the under-reporting in Tribal communities? What are some ways that the FCC can look outside the beltway to engage on this issue?

RESPONSE:

I fully agree that many Tribal communities face major obstacles in obtaining access to broadband, and the Commission must prioritize those unserved areas, as well as non-Tribal areas facing equally poor or even worse broadband availability. Therefore, in the Commission's recent Notice of Proposed Rulemaking seeking comment on creating a framework for the upcoming Rural Digital Opportunity Fund auction, I asked the Chairman to seek comment on directing added financial support, via a reserve price bonus or targeted bidding credits, to areas that are completely unserved. Targeting additional support to these most disadvantaged areas will ensure that scarce Universal Service funding is allocated efficiently and based on true need.

With respect to mapping the availability of broadband, I fully agree that the Commission's 477 data is deeply flawed in presenting an adequately granular picture of where service exists. I am hopeful, however, that the Commission's new Digital Opportunity Data Collection effort, which will require fixed providers to submit broadband service polygons, will significantly improve the Commission's mapping process, and enable the Commission to better focus on those millions of Americans without service, including those living on Tribal lands.

Question 2: President Trump is trying to use existing emergency authorities in an unprecedented way when he cannot get Congress or our allies and trading partners to do what he wants them to do. He has also been very clear that he sees the media as "the enemy of the people" and levies daily attacks on a variety of FCC-regulated media organizations and other media owners, threatening them with retaliation.

Existing law gives the president the ability to declare an emergency and close down parts of the Internet and take over broadcast networks to transmit messages. We expect that this would only occur in the direst circumstances such as war or extreme natural disasters. But there is no guarantee that is the case with this—or any other President.

Would the commission work with Congress and provide technical assistance to better reform our emergency laws regarding communications technology to ensure that emergency authority is not abused by any President for political or personal purposes?

RESPONSE:

I have always tried to maintain an open line of communication with Congress on any and all issues for which technical assistance is requested, and this remains true in the context of emergency communications. I am happy to provide feedback on any legislative proposals regarding this issue and others.

Question 3: Millions of Americans rely on their local public radio station for news, educational and cultural programming, emergency alerts and public safety information – including in rural, remote and tribal areas. Many public radio stations are the only local news organizations in their communities, and provide unique programming and information tailored to their communities' needs and tastes. The public radio satellite system relies on C-Band spectrum to distribute national and regional programming to and among the local stations. In parts of New Mexico and other rural and tribal areas, there are few alternative sources of news, public safety information, and regional programming -- and no workable alternatives to satellite as a means to distribute public radio programming.

As the FCC considers plans to transition C-Band spectrum for 5G and commercial wireless services, please detail how the agency will ensure the C-Band spectrum and satellite service necessary for local public radio stations to continue to provide vital news, programming, and public safety services to America's rural and tribal communities.

RESPONSE:

Yes. From the beginning, I set forth certain principles that must be met in order to support the market-based plan to repurpose some of the C-Band spectrum for next-generation wireless services. These principles included providing a transparent process; reallocating more than 200 megahertz; and ensuring that the incumbents would be accommodated and held harmless. After the many conversations that I have had with interested parties, I believe it is possible to provide upwards of 300 or more megahertz for 5G, while still fully protecting those that currently utilize C-Band satellite services, including local public radio, in the remaining satellite portion of the band.

Senator Jon Tester

I. Written Questions Submitted by Hon. Jon Tester to the Federal Communications Commission

Question A. The FCC's Captioned Telephone Services gives folks independence to connect with the world. I support the FCC's intention to ensure this program can handle the influx in participates, however I am concerned about using an automatic speech recognition to replace humans. What is the Commission doing to ensure this technology is adequate and the quality of this service does not decrease?

RESPONSE:

I am fully committed to fulfilling our statutory mandate to provide functionally equivalent service to Americans with disabilities while minimizing burdens on TRS ratepayers. Thus, I have supported experimentation with alternative technologies, including ASR. While not perfect for all IP CTS consumers in all instances, ASR can undoubtedly be a helpful tool for certain users, and this technology has improved in recent years. The Commission has made clear that providers opting to use fully automated ASR must meet the Commission's minimum TRS standards. Further, the Commission continues to support IP CTS providers that do not use fully-automated ASR, thus ensuring that non-ASR options continue to be available to consumers.

Question B. I am also concerned that reforms to this program would require candidates to travel to their State equipment distributor to receive certification instead of from their physician. As you move forward, will you take into consideration what impact this will have on folks in rural America?

RESPONSE:

While I am committed to preventing the waste of TRS fund resources and ensuring that IP CTS is only delivered to those who objectively need it, any changes to certification requirements must be supported by a fulsome record and ought to be balanced against potentially disparate burdens on individuals in rural areas. Should a draft Order requiring a new method of user certification be circulated to the Commission, I will fully examine the applicable record prior to voting to approve such a change.

II. Written Questions Submitted by Hon. Jon Tester to the Federal Communications Commission

Question A. According to your Report on Broadband Deployment in Indian Country, less than half of homes on rural reservations have access to that same level of broadband service. What are your recommendations for Congress on how to help?

RESPONSE:

Despite a positive overall trend in deploying broadband across our country, many Tribal and non-Tribal communities continue to lack access to any form of broadband whatsoever, and I have urged the Commission to prioritize those unserved areas in awarding Universal Service support. Similarly, in allocating any new funding for broadband infrastructure, I would urge Congress to direct that support to unserved areas—including unserved Tribal communities—rather than areas where broadband already exists. To appropriately target those areas, and to prevent wasteful and duplicative funding, I have encouraged Congress to provide clear directives regarding coordination to the various agencies and departments that distribute broadband funding and to maintain oversight over their coordination. Further, I have recommended that Congress consider the FCC's Universal Service Fund as a primary means to distribute new funding, given the cost-effectiveness of the Commission's reverse auction mechanism for distributing support.

Question B. Consultations plays such an important role, is the FCC's office of Native Affairs and Policy adequately staffed?

RESPONSE:

Issues related to human resources in the Commission's bureaus and offices are handled by the Office of Managing Director; therefore, I must defer to the Commission's Managing Director on this question. However, I am not aware of specific concerns being raised regarding the staffing levels for the Office of Native Affairs and Policy.

Question C. Do you have any updates on the progress of the Native Nations Communications Task Force?

RESPONSE:

The work of the Native Nations Communications Task Force is overseen by the Office of Native Affairs and Policy; therefore, I must defer to the Commission's Office of Native Affairs and Policy on this question.

III. Written Questions Submitted by Hon. Jon Tester to the Federal Communications Commission

Question A. Do you believe we need to remove existing Huawei equipment from our telecommunications infrastructure?

RESPONSE:

I have spoken at length about attempts by the Chinese government to monopolize the development of 5G technologies. From using government-sponsored loans and capital to gain market share in the wireless manufacturing market and to promote their providers in China and abroad, to manipulating the international standard-setting process to favor their companies and technologies, the Chinese government is trying to establish its global dominance in wireless technologies for generations to come. As Chinese equipment manufacturers and wireless providers become more pervasive in global communications systems due to these unfair advantages, the Chinese government will have access to any information that touches their equipment or networks. Until we know how to contain this threat, we must consider ways to limit, and, if necessary, remove, such equipment from our telecommunications infrastructure.

Written Questions for the Record from the Hon. Jerry Moran to Michael O'Rielly

Question 1. At CES conference this year, companies were demonstrating new Wi-Fi technology that can deliver faster speeds, lower latency, and better capacity for Wi-Fi users. However, I understand that these technologies rely on wide bandwidth channels to deliver those consumer benefits. Do we have enough unlicensed spectrum to support deployment of these new technologies?

At the current time, there is a lack of spectrum allocated for unlicensed services and the two workhorse bands, 2.4 and 5 GHz, are becoming very congested. Further, these bands do not have the wide channels needed for next generation unlicensed services. As such, I am leading efforts to increase spectrum available for unlicensed use, and this goal has become a priority for this Commission. I am hopeful that the Commission will act in the coming months to permit unlicensed services in the 6 GHz band and a sizable portion of the 5.9 GHz band.

Question 2. How should the FCC move forward on its 6 GHz proceeding to ensure we have sufficient spectrum to enable next-gen Wi-Fi?

The Commission needs to act quickly to permit unlicensed services within the 6 GHz band, and I expect it to do so. This must include allowing low power services indoors and very low power services throughout the band, and establishing technology protection requirements to permit higher-powered unlicensed services as well. All of this can be done while fully protecting incumbent users of the band from harmful interference.

Written Questions for the Record from the Hon. Mike Lee to Michael O'Rielly

Background. The internet has caused a communication renaissance in our country revolutionizing nearly every sector of our economy. This renaissance has also come to the video marketplace. Unfortunately, our current legal framework for videos largely reflects a world of the 1980s and early 1990s. This was a world that did not use the internet, which is now a common tool that consumers use to view video entertainment today.

Question 1. How are consumers affected by these outdated regulations?

As you know, many consumers are supplementing their cable, broadcast, and satellite video providers' offerings or switching entirely to programming delivered through streaming, over-the-top, or virtual MVPDs. Yet, since that leaves providers with fewer customers among whom to spread overall costs, those remaining customers are forced to pay higher prices for services. Moreover, a number of legacy video providers are dropping video content altogether, forcing consumers to find alternative programming sources. In sum, the current regulatory structure imposes asymmetric burdens on competitors in the same video services marketplace and is harming legacy customers and their providers as a result.

> *Follow-up.* Would consumers benefit from a concerted effort to update our laws and remove burdensome mandates?

Absolutely, the answer is yes. While some might argue there are plenty of choices for new content in today's marketplace and no need for reform, we are not seeing a fully efficient market at work because of the disparate treatment between the unregulated, high-tech companies that offer video content and the traditional providers that expend significant resources on regulatory compliance. Without regulatory reform, consumers are at risk of losing access to valued programming. Any outdated video regulations that require cable operators to dedicate resources toward compliance or unnecessary burdens directly reduce the amount of investment they could be making to build out their broadband networks.

Question 2. Reforms in this space should also include updates to our cable franchise framework, particularly the franchising requirements outlined in Section 621 of the Communications Act. Could you explain how the current cable franchise framework affects cable operators today?

Fundamentally, the current framework gives local franchise authorities (LFAs) disproportionate leverage over cable operators due to the broad nature of many of the statute's provisions, and its underlying assumption that cable companies operate as monopolies. This provides all new video entrants that operate outside of this framework with enormous advantages, including in terms of cost and procedural ease. It's one significant reason incumbent providers are preparing their own over-the-top offerings. Such a structure is not sustainable for incumbent providers and their current customers.

Follow-up. How could reforms to this current framework help enable more broadband deployment and investment?

A more holistic approach to video offerings, one that recognizes the dynamic competitive environment, could be incredibly beneficial for everyone – providers and consumers alike. By removing regulatory overhang, prevalent within the current franchising structure, incumbent video providers would be free to offer more competitive offerings, rather than be forced to migrate to other technologies because of regulatory arbitrage. This would free up capital to invest in new programming and expansion of services.

Questions for the Record from Senator John Thune
United States Senate Committee on Commerce, Science, and Transportation
"Oversight of the Federal Communications Commission"
August 16, 2018

Question 1. Please describe actions the FCC has taken to meet its statutory obligations in regards to the T-band.

Today, many public safety authorities in the nation's largest metropolitan areas, including Boston, Chicago, Dallas, Houston, Los Angeles, Miami, New York, Philadelphia, Pittsburgh, San Francisco, and Washington have licenses in the 470-512 MHz band. However, in the Middle Class Tax Relief and Job Creation Act of 2012, Congress tasked the Federal Communications Commission with recovering and auctioning this spectrum for commercial use by February of 2021. The law specifically requires that proceeds from the T-band auction be used for T-band relocation.

Following its passage, the FCC froze the processing of applications for new or expanded T-band operations in order to avoid adding to the cost and complexity of public safety relocation. The FCC also waived an earlier deadline associated with the migration to narrowband technologies. In addition, in February of 2013, the FCC released a public notice seeking comment on the technical, financial, administrative, legal, and policy implications of implementing this aspect of the Middle Class Tax Relief and Job Creation Act. Following on this effort, in October of 2014 the FCC opened up the 700 MHz narrowband reserve channels for general licensing and afforded T-band public safety licensees priority access to these channels in T-band areas. However, in light of the time that has elapsed since the agency first sought comment on T-band relocation, I believe a prudent next step would involve refreshing the record on this subject, both so that the agency can take steps to prepare for commercial auction and also so it can provide Congress with updated information on the relocation of existing public safety services that rely on these airwaves.

Questions for the Record from Senator Jerry Moran
United States Senate Committee on Commerce, Science, and Transportation
"Oversight of the Federal Communications Commission"
August 16, 2018

Question 1. How can "crowdsourcing" data assist the Commission in producing more accurate information regarding broadband availability depicted on the Mobility Fund Phase II eligibility map?

The wireless maps the Federal Communications Commission uses are not what they should be. They have too many inaccuracies to be reliable. They overstate signal strength in rural America and understate where universal service support is needed to ensure that communities are not left behind.

This is a problem. However, the agency is not without tools to clean up this mess.

First, the FCC can use the wisdom of crowds to fix what is wrong. More than 200,000 volunteers have downloaded the agency's Speed Test app that collects anonymized wireless broadband performance data. We need to find a way to put this information to use. Excluding crowdsourcing from our innovation toolkit means forgoing the opportunity for better maps.

Second, the FCC already has committed to having the Universal Service Administrative Company (USAC) test and validate the network coverage of winning bidders in its Mobility Fund auction—after they have built out using this new source of universal service support. Why not give USAC a role up front and have them assist with validating existing data before the auction? Even doing some sampling like this could yield important information about systematic problems with our existing maps. Moreover, this kind of review, like audits, can be an essential tool to ensure program effectiveness.

Finally, the FCC should mobilize other resources at its disposal. That includes the personnel the agency has available for spot testing in field offices in Atlanta; Boston; Chicago; Columbia, Maryland; Dallas; Denver; Honolulu; Los Angeles; Miami; New Orleans; New York; Portland, Oregon; and San Francisco. In short, there's no reason why the FCC should not use the widely-dispersed spectrum expertise and tools it already has deployed across the country.

Questions for the Record from Senator Shelley Moore Capito
United States Senate Committee on Commerce, Science, and Transportation
"Oversight of the Federal Communications Commission"
August 16, 2018

Question 1. In many rural communities, students have long commutes on school buses sometimes upwards of half an hour, or even longer one-way. Given the connectivity challenges many students face in rural communities, how could E-Rate help connect school buses with wi-fi to allow students to use commute time to do homework, projects, or other school work?

According to the Senate Joint Economic Committee, the Homework Gap is real. By their estimate, it affects 12 million children across the country. They are everywhere. In my time at the FCC, I have spoken with students in Texas who do homework at fast food restaurants with a side of fries—just to get a free wi-fi signal. I have heard from students in Pennsylvania who make elaborate plans every day to head to the homes of friends and relatives just to be able to get online. I have listened to a high school football player in rural New Mexico who lingers in the pitch-black dark of the school parking lot after games with a device in hand because it is the only place he can get a reliable connection. These kids have grit. But it shouldn't be this hard. Because today no child can be left offline—and developing digital skills is flat-out essential for education and participation in the modern economy.

More needs to be done to address the Homework Gap, because it's an especially cruel part of the new digital divide. To this end, some communities are installing wi-fi routers on district school buses. After all, in rural areas, students often ride the bus an hour to get to school and an hour to get home at night. So these communities turn ride time into connected time for homework. These buses are hitting the road everywhere from Huntsville, Alabama to Marengo,

Illinois to Watkins Glen, New York and many more places in between. It's a smart idea that deserves attention and support, including from the FCC's E-Rate program, as you suggest. It also is the subject bipartisan legislation. S. 2958 specifically directs the FCC to make the provision of wi-fi access on school buses eligible for E-Rate support.

Senator Edward J. Markey
Senate Commerce
Oversight of the Federal Communications Commission
June 12, 2019

IP-CTS and Automated Speech Recognition

Automated speech recognition (ASR) has great promise for Internet Protocol Captioned Telephone Service (IP-CTS). However, I understand that current ASR engines vary in quality and accuracy, and I am concerned that nascent technologies might be certified for IP-CTS use without adequate testing. I believe that we need to be careful about implementing this service before it is fully ready.

Question: **Do you agree that we need to ensure ASR-only providers can handle 911 and related public safety calls before such technology is FCC approved? In your view, has the FCC done enough adequate testing of all types of ASR engines?**

For individuals with hearing loss, access to Internet Protocol Captioned Telephone Service can significantly enhance their ability to communicate and participate in modern life. With IP CTS, those with residual hearing can use their own voice to speak during a call but then read captions on their device when the called party responds. This means that people with hearing loss can do the things so many of us take for granted—picking up the phone and seeking emergency help; securing a job; making a doctor's appointment; following up with a child's teacher; and connecting with family and friends.

As you suggest, automated speech recognition (ASR) holds promise for IP CTS. But I believe the FCC got it backwards when it declared that IP CTS using ASR was eligible for compensation from the Telecommunications Relay Service fund before setting forth standards for ASR that would ensure functional equivalency under the Americans with Disabilities Act. As I said at the time of this decision, the FCC's action put the cart before the horse by introducing ASR into the IP CTS program before we address our most basic regulatory responsibilities. Naturally, one of these responsibilities involves how 911 and public safety calls will be handled. While this is a topic of discussion in the FCC's ongoing rulemaking, I agree that the agency will need to ensure that IP CTS using ASR can demonstrate that it can handle 911 and related public safety calls.

Protecting the C-Band for Public Radio

The Public Radio Satellite System relies on C-Band frequencies to distribute news, programming, and public safety information to nearly 1,300 interconnected local public radio stations and millions of Americans across the country.

Question**: Can you assure me that any plans to transition C-Band spectrum for new wirelesses services will not impair the vital role that public radio plays in our news, educational programming, and emergency services?**

In the Public Broadcasting Act, Congress found that it "is in the public interest to encourage the growth and development of public radio and television broadcasting, including the use of such media for instructional, educational, and cultural purposes." I wholeheartedly agree.

Today C-Band spectrum is used to deliver more than 450,000 hours of news, music, and cultural programming to 1,278 public radio stations throughout the United States. This programming reaches roughly 95 percent of the United States population.

The FCC is exploring a range of mechanisms to open up a portion of the C-Band for new mobile use. This is important, because the United States has been slow, relative to our international peers, at bringing mid-band spectrum to market for the next generation of wireless service, known as 5G. Identifying sources of these airwaves that may be viable for new wireless use is a necessary part of the United States reclaiming leadership in 5G deployment. However, as we explore opportunities in the C-band, we must acknowledge that these frequencies are in use today by television and radio broadcasters and cable operators responsible for delivering programming to more than 100 million households. Consequently, I believe the FCC will need to addresses the challenges associated with introducing new mobile activity in this band while taking into consideration the significance of present use. I also believe we need to be creative as we assess this band and preserve opportunities for public radio as we move forward.

Senator Udall Questions for the Record

Question 1: **Has the FCC has done enough to push companies into building resilient networks or even publishing best practices to help prevent future outages?**

When communications outages occur, so much of modern life grinds to a halt. This is not just an inconvenience, it can be a threat to our economic and national security.

In light of this, I believe the FCC must do a better job studying what went wrong during outages in the past in order to better prepare for network failures in the future. To this end, I am disappointed that the agency has been slow to issue reports on the performance and resiliency of networks in the wake of disasters like the 2017 hurricane season. Likewise, I am concerned that the agency has yet to issue a report assessing the nationwide CenturyLink outage in late 2018, which included some locations in New Mexico. Consequently, I believe the FCC should investigate and issue a timely report following every major network outage. I also believe the agency should annually issue a general report on outages in order to assess trends, areas of concern, and develop best practices.

As a related matter, the Government Accountability Office issued a report in 2018 criticizing the FCC with respect to its work on network resiliency. The GAO recommended the FCC develop specific and measurable objectives for its wireless resiliency framework, which was developed to strengthen communications networks during emergencies. Since that time, the FCC has issued four public notices, seeking comment on the framework, its implementation, and its effectiveness. In addition, on November 5, 2018, the agency's Public Safety and Homeland Security Bureau sent letters to carriers that had committed to the principles of the framework and asked that they provide post-disaster action reports from the 2017 and 2018 hurricane seasons. I

believe that with the information filed in response to these letters and public notices, the FCC should update this framework and address the deficiencies identified by GAO. At the same time, the agency should modernize its reporting requirements for network outages. While today our policies require outage reporting for traditional telephony, no comparable reporting is required for broadband.

Question 2: **Tribal communities continue to lag behind the rest of the country in the deployment of broadband. The GAO found that inaccuracies in FCC broadband data have led to underestimates of the magnitude of the digital divide on tribal lands. So we may not even have a clear picture as to how wide that gap really is given the current data collection regime. What changes is the FCC considering as part of its efforts to modernize FCC form 477 in order to specifically address the under-reporting in Tribal communities? What are some ways that the FCC can look outside the beltway to engage on this issue?**

Native Americans should not be the last Americans to benefit from the power of the digital age. Unfortunately, as you note, the FCC has been criticized by the Government Accountability Office for its faulty data regarding the state of broadband access on Tribal lands. To make matters worse, in the FCC's recently released Report on Tribal Deployment in Indian Country the agency did not address the GAO's concerns.

However, the FCC adopted a rulemaking on August 1, 2019 seeking comment on ways to improve data collection, including how best to incorporate the input of Tribal governments in broadband coverage maps. This is a positive development. There are also things we can do now while this rulemaking is ongoing. To this end, I believe the FCC should work with its Native Nations Communications Task Force to come up with a plan to collect better broadband data on Tribal lands. This effort could include sharing existing data with members of the Task Force for community assessment followed by in-person consultations to witness the state of deployment in their Tribal areas firsthand.

Question 3: **President Trump is trying to use existing emergency authorities in an unprecedented way when he cannot get Congress or our allies and trading partners to do what he wants them to do. He has also been very clear that he sees the media as "the enemy of the people" and levies daily attacks on a variety of FCC-regulated media organizations and other media owners, threatening them with retaliation.**

Existing law gives the president the ability to declare an emergency and close down parts of the Internet and take over broadcast networks to transmit messages. We expect that this would only occur in the direst circumstances such as war or extreme natural disasters. But there is no guarantee that is the case with this—or any other President.

Would the commission work with Congress and provide technical assistance to better reform our emergency laws regarding communications technology to ensure that emergency authority is not abused by any President for political or personal purposes?

Section 706 of the Communications Act allows the President of the United States to shut down or take control of "any facility or station for wire communication" upon proclamation "that

there exists a state or threat of war involving the United States." While at one point "wire communication" meant telephone calls or telegrams, today this language might be interpreted to cover the internet. As a result, Section 706 could serve as an internet "kill switch" in the United States, available to the president in times of war or emergency.

It is difficult to understate the potential impact of such action or the potential for abuse. The ambiguity in this statute could be used to disrupt political discourse, hinder political activity, or infringe on constitutional rights. This is alarming.

I commit to working with Congress and providing technical assistance, as needed, to reform our emergency laws regarding communications technology in order to ensure that this emergency authority is not abused by any President for political or personal purposes.

Question 4: **Millions of Americans rely on their local public radio station for news, educational and cultural programming, emergency alerts and public safety information – including in rural, remote and tribal areas. Many public radio stations are the only local news organizations in their communities, and provide unique programming and information tailored to their communities' needs and tastes. The public radio satellite system relies on C-Band spectrum to distribute national and regional programming to and among the local stations. In parts of New Mexico and other rural and tribal areas, there are few alternative sources of news, public safety information, and regional programming -- and no workable alternatives to satellite as a means to distribute public radio programming.**

As the FCC considers plans to transition C-Band spectrum for 5G and commercial wireless services, please detail how the agency will ensure the C-Band spectrum and satellite service necessary for local public radio stations to continue to provide vital news, programming, and public safety services to America's rural and tribal communities.

In the Public Broadcasting Act, Congress found that it "is in the public interest to encourage the growth and development of public radio and television broadcasting, including the use of such media for instructional, educational, and cultural purposes." I wholeheartedly agree.

Today C-Band spectrum is used to deliver more than 450,000 hours of news, music, and cultural programming to 1,278 public radio stations throughout the United States. This programming reaches roughly 95 percent of the United States population.

The FCC is exploring a range of mechanisms to open up a portion of the C-Band for new mobile use. This is important, because the United States has been slow, relative to our international peers, at bringing mid-band spectrum to market for the next generation of wireless service, known as 5G. Identifying sources of these airwaves that may be viable for new wireless use is a necessary part of the United States reclaiming leadership in 5G deployment. However, as we explore opportunities in the C-band, we must acknowledge that these frequencies are in use today by television and radio broadcasters and cable operators responsible for delivering programming to more than 100 million households. Consequently, I believe the FCC will need to addresses the challenges associated with introducing new mobile activity in this band while

taking into consideration the significance of present use. I also believe we need to be creative as we assess this band and preserve opportunities for public radio as we move forward.

Senator Jacky Rosen

BROADBAND FOR LOW-INCOME COMMUNITIES

According to the Pew Foundation, rural Americans, seniors, racial minorities, and those with lower incomes are less likely to have broadband service at home. Nonetheless, the FCC recently proposed making changes to the Lifeline program, which helps low-income households stay connected. This would potentially threaten access to broadband for rural, senior, and low-income Americans. The proposal would bar resellers from participating in the Lifeline program. That means approximately 86,000 families in Nevada could be negatively impacted, including 28,000 seniors, 48,000 households with children, 8,000 veteran families, and 600 tribal families.

Furthermore, if this proposal were to take effect, only one service provider would meet the FCC's new rule, and that carrier provides services in only a limited number of states. This could undermine the ability of rural and low-income Nevadans and other Americans to connect to loved ones, health services, their employer, or even to public safety services.

Question: **Commissioner Rosenworcel, would you please share your thoughts about this proposal and discuss how we might mitigate the potential loss of phone and broadband service by millions, especially those living in rural and tribal areas?**

For more than three decades, the Lifeline program has provided support for basic communications in low-income households across the country. However, in a rulemaking adopted in 2017, the FCC proposed to slash this program from front to back, reducing the number of participants by as much as 70 percent. In a dissenting statement, I strongly objected to this proposal. I believe it is at odds with our statutory duty to support and advance universal service. Moreover, cutting off communications like this is cruel for the communities that rely on Lifeline service, including more than 2 million elderly, 1.3 million veterans, 500,000 individuals in Puerto Rico, as well as residents of many tribal communities. In addition, cutting off Lifeline service would disproportionately harm those victims of domestic violence and homeless youth who rely on this program to stay connected and stay safe. The FCC should not continue in any way, shape, or form with its proposal to cut participation in the Lifeline program by as much as 70 percent. Moreover, it should terminate the docket and close the proceeding entirely.

IP CAPTIONED TELEPHONE SERVICE

One area where telecommunications technology is making a real impact is with our most vulnerable populations, from our seniors to our disabled veterans to our hard of hearing and deaf population. As a member of the Special Committee on Aging I am especially concerned with the 38,000 deaf and hard of hearing people in my state of Nevada. With a growing aging population, not in just my state, but across the country, many will rely on IP Captioned Telephone Service to communicate. This service allows a person with hearing

loss to talk normally into the phone, while reading captions of what the person on the other end of the line is saying in real time. My office has heard from consumers who are concerned that as these services move toward automated technologies, the replacement of humans with fully automated speech recognition may result in an inferior service.

Question: **Commissioner Rosenworcel what safeguards are needed to ensure that new and emerging services like automated captioning and others that record voice data protect consumer privacy?**

For individuals with hearing loss, access to Internet Protocol Captioned Telephone Service can significantly enhance their ability to communicate and participate in modern life. With IP CTS, those with residual hearing can use their own voice to speak during a call but then read captions on their device when the called party responds. This means that people with hearing loss can do the things so many of us take for granted—picking up the phone and seeking emergency help; securing a job; making a doctor's appointment; following up with a child's teacher; and connecting with family and friends.

Automated speech recognition (ASR) holds promise for IP CTS. But I believe the FCC got it backwards when it declared that IP CTS using ASR was eligible for compensation from the Telecommunications Relay Service fund before setting standards for ASR that would ensure functional equivalency under the Americans with Disabilities Act. Moreover, these standards must be informed by a thoughtful assessment of the implications for consumer privacy. In particular, the FCC needs to set forth expectations regarding the protection, retention, storage, and sharing of any conversations that use ASR.

Questions for the Record—Senator Amy Klobuchar
June 12, 2019-FCC Oversight hearing

<u>Questions for Commissioner Rosenworcel, Federal Communications Commission</u>

I have repeatedly raised concerns about the harmful effects of the proposed merger of T-Mobile and Sprint—which would combine two of the four remaining nationwide wireless carriers—and have called on the Commission and the Justice Department to reject it. At the hearing, you testified that you have never seen a merger transaction dealt with like this—you said that you still have not received economic analysis or legal analysis on the transaction, yet some of your colleagues have already announced their support for the merger.

Question: **Can you elaborate on your concerns regarding the FCC's review process for this merger?**

On May 20, 2019, the Chairman of the FCC announced in a press release that this "transaction is in the public interest" and that he would "recommend to [his] colleagues that the FCC approve it." Shortly thereafter, two of my colleagues followed his lead and announced their support for the merger.

At the time of these announcements, no economic, legal, or engineering analysis from the agency regarding this transaction had been shared with my office at the FCC. More than two months later, I still have not received such analysis in any draft decision concerning the merits of this merger. I remain skeptical that this combination is good for consumers, good for competition, or good for the economy.

Moreover, in light of substantial changes to the original transaction made through negotiation with the Department of Justice, I believe that before the FCC votes on this merger, the public should have the opportunity to weigh in and comment. Too much here has been done behind closed doors.

One in five rural households in my state lack access to high-speed internet service, and the FCC's maps do not report this accurately in my state or across the country. I introduced the Improving Broadband Mapping Act with Senators Capito, Manchin, and Hoeven to direct the FCC to establish rules to improve its data collection process to determine where broadband service is available.

Question: **Can you explain how using consumer-reported data, as well as state and local municipalities' data, could help the FCC to create more accurate coverage maps?**

To build better broadband maps, the FCC needs to reach out beyond Washington. Traditionally, the agency has relied on carrier-supplied data and maps to determine where service is and is not across the country. It is essential that we improve upon this effort by incorporating input from consumers and state and local authorities. To this end, I believe the FCC should explore how crowdsourcing can inform our maps. This may be accomplished on our website or by incorporating the data that comes in to the FCC via its speed test app, which has been downloaded more than 200,000 times. In addition, we need to find ways to incorporate the data-gathering done by state and local authorities and provide them with a process to challenge service information they believe may be incorrect at the FCC. We also should explore how the FCC's regional offices and the universal service fund administrator can spot check and audit carrier-submitted data in the field. Finally, we should be open to creative ways to improve the data that informs our maps, including tracking service via postal trucks in rural areas.

Senator Jon Tester

<u>Captioned Telephone Services</u>

Question 1: **The FCC's Captioned Telephone Services gives folks independence to connect with the world. I support the FCC's intention to ensure this program can handle the influx in participates, however I am concerned about using an automatic speech recognition to replace humans. What is the Commission doing to ensure this technology is adequate and the quality of this service does not decrease?**

For individuals with hearing loss, access to Internet Protocol Captioned Telephone Service can significantly enhance their ability to communicate and participate in modern life. With IP CTS, those with residual hearing can use their own voice to speak during a call but then

read captions on their device when the called party responds. This means that people with hearing loss can do the things so many of us take for granted—picking up the phone and seeking emergency help; securing a job; making a doctor's appointment; following up with a child's teacher; and connecting with family and friends.

Automated speech recognition (ASR) holds promise for IP CTS. But I believe the FCC got it backwards when it declared that IP CTS using ASR was eligible for compensation from the Telecommunications Relay Service fund before setting forth standards for ASR that would ensure functional equivalency under the Americans with Disabilities Act. As I said at the time of our decision, the FCC's action put the cart before the horse by introducing ASR into the IP CTS program before we address our most basic regulatory responsibilities. As the FCC proceeds and evaluates the use of ASR in connection with this service, it must ensure that it lives up to the functional equivalency standard required by the law.

Question 2: **I am also concerned that reforms to this program would require candidates to travel to their State equipment distributor to receive certification instead of from their physician. As you move forward, will you take into consideration what impact this will have on folks in rural America?**

Yes, absolutely.

Tribal Issues

Question 1: **According to your Report on Broadband Deployment in Indian Country, less than half of homes on rural reservations have access to that same level of broadband service. What are your recommendations for Congress on how to help?**

I believe that Native Americans should not be the last Americans to benefit from the power of the digital age. Yet, as you note, less than half of homes on rural reservations have access to broadband service. There is clearly more work to do—and both the FCC and Congress can help.

At the outset, it has been nearly two decades since the FCC released its Statement of Policy establishing a government-to-government relationship between the agency and federally-recognized Tribes. I believe refreshing this statement and updating its principles of consultation would be a worthwhile exercise. It would set the stage for greater cooperation, consistent with our federal trust responsibility.

The FCC recently released a Report on Broadband Deployment in Indian Country. Under the law, it is now required to conduct a proceeding to address the unserved areas identified in the report. This proceeding is an opportunity to get the data right and implement policies to address the inadequate state of broadband on Tribal lands.

On August 1, 2019, the FCC adopted a rulemaking seeking comment on ways to improve its broadband data collection. As part of this effort, the agency asked how best to incorporate the input of Tribal governments in order to improve broadband coverage maps.

Congress should monitor these efforts closely. Congress also should direct the FCC to improve its outreach efforts with Tribes to increase the likelihood that broadband connections are available at anchor institutions—schools, libraries, and health centers—on Tribal lands. While funds for these institutions are available via the E-Rate and Rural Health Care program, not all Tribal communities make full use of this resource. Finally, Congress may wish to allocate funds from future spectrum auctions to directly provide enhanced universal service support to carriers serving Tribal lands.

Question 2: **Consultations plays such an important role, is the FCC's office of Native Affairs and Policy adequately staffed?**

The Chairman is uniquely situated to provide information about staffing for the FCC's Office of Native Affairs and Policy. However, I believe the answer to your question is "no." I do not believe that this office has been given the staffing or authority it needs to vigorously participate in the full range of FCC proceedings that impact Tribal communities and Tribal lands.

Question 3: **Do you have any updates on the progress of the Native Nations Communications Task Force?**

On February 8, 2018, the Native Nations Task Force was renewed for a new, three-year term and renamed the Native Nations Communications Task Force. On October 24, 2018, the Chairman of the FCC appointed the members of this Task Force.

Although the Chairman is uniquely situated to provide an update as to the progress of the Task Force, I believe it can play a significant role in the agency's work to expand communications on Tribal lands. To this end, I would seek guidance from the Task Force on three subjects. First, I would ask for their assistance with the ongoing effort to improve data regarding the state of broadband on Tribal lands. Second, I would seek their assistance with the recent remand from the courts involving the FCC's decision in 2017 to limit the availability of Lifeline support on Tribal lands. I did not support this decision, but I think any subsequent effort from the agency regarding this program and its availability in Tribal communities would benefit from the participation of the Task Force. Third, I would seek their continued input on the use of spectrum on Tribal lands. The FCC recently changed its policies concerning Educational Broadband Service, creating a new opportunity for Tribal communities to seek spectrum licenses in the 2.5 GHz band. The Task Force could assist with outreach to Tribes on this initiative.

<u>Huawei</u>

Question 1: **Do you believe we need to remove existing Huawei equipment from our telecommunications infrastructure?**

Yes. I understand that the Senate Committee on Commerce, Science, and Transportation recently approved the United States 5G Leadership Act, which would make $700 million available to help communications providers across the country remove insecure equipment from their existing networks. In addition, this legislation would take steps to prevent the support of insecure equipment on a going forward basis.

As we proceed with such policies, I believe that we should consider the lessons learned from equipment purchases required by the relocation of broadcast stations in the wake of the 600 MHz incentive auction.

When Congress authorized the FCC to conduct this incentive auction, it required the agency to reimburse a range of equipment costs incurred by full power and Class A television licensees that were assigned to new channels, as well as certain costs incurred by multichannel video program distributors to continue to carry such stations. Congress later expanded the list of entities eligible to be reimbursed for auction-related expenses to include low-power television, translator, and FM broadcast stations.

Before making the authorized funds available, the FCC required eligible entities to certify to the agency basic information about their current broadcasting equipment and detailed cost estimates for their replacement. Next, the FCC conducted audits, data validations, and site visits to ensure the accuracy of the information submitted. To ensure transparency, the FCC made certain equipment eligibility, cost, and disbursement information available to the public. Finally, the FCC clarified early in the process that it would only fund comparable equipment and not upgrades.

In the end, these measures helped maximize the funds available for reimbursement and reduced waste, fraud, and abuse. I believe this effort could serve as a model for the removal of insecure equipment and the implementation of the United States 5G Leadership Act.

Attachment—Additional Questions for the Record

Written Questions Submitted by Chairman Roger F. Wicker to Honorable Jessica Rosenworcel

Question 1: **Senator Johnson asked the panel about the interagency coordination problems regarding the U.S. position on interference in the 24 GHz band. In response you stated, "I can be a little less diplomatic. I have not been in the meetings that the chairman has referred to, but I can tell you this; the situation we have is embarrassing. We have to resolve these issues before we put the spectrum to market in an auction." Did you vote to adopt the final procedures for Auction 102 on August 3, 2018?**

Yes.

Question 2: **When I asked Commissioner Starks if he was satisfied with the Commission's analysis regarding spectrum interference Commissioner Starks stated, "The last thing that I would say is that I do have confidence in the Office of Engineering and Technology at the FCC, but I haven't personally studied this issue." Do you share Commissioner Starks' confidence in the Office of Engineering and Technology at the FCC?**

Yes.

Written Questions Submitted by Senator Todd Young to Honorable Jessica Rosenworcel

Question: **Currently, millions of rural Americans lack access to fixed high-speed broadband, which in today's economy is perceived as basic infrastructure. In the FCC's 2019 *Broadband Deployment Report*, the FCC concluded that broadband is being deployed to all Americans, including rural Americans, in a timely fashion. The report also asserted that FCC policies are promoting investments and removing burdensome barriers.**

With that said, according to a preliminary analysis, which was released on Monday by USTelecom, U.S. broadband provider investments increased by approximately $3 billion to total roughly $75 billion in 2018.

Given the ongoing growth in private investments, what are the FCC's priorities moving forward to ensure U.S. broadband providers have the resources they need in the free market for continued investments in rural America? Additionally, how will the FCC continue to update its mapping to provide an accurate account of high-speed service?

Broadband is the essential infrastructure of the digital age. It supports all aspects of modern commercial and civic life. As you suggest, there are many communications

companies—large and small—that have done significant work to deploy high-speed service across the country. However, there remain too many places, especially in rural communities, where broadband is unavailable.

In a report released this year, the FCC announced that 21.3 million Americans lack access to broadband, including 16.8 million in rural areas. That's unacceptable.

What is worse, however, is that these numbers likely overstate the reach of high-speed service across the country. That's because there are serious problems with the data the FCC uses to assess the state of broadband deployment. The methodology used to determine the presence of service is both overbroad and imprecise. Under the present data collection system used by the FCC, if a service provider claims that they serve a single customer in a census block, the agency assumes that there is service throughout the census block. As a result, the FCC's claim that there are only 21.3 million people in the United States without access to broadband is just not credible. As further evidence, consider that another recent analysis reported in the *New York Times* that concluded that as many as 162 million people across the country do not use internet service at broadband speeds.

Unfortunately, the inaccurate data used in the FCC's broadband report earlier this year is the same data that is used to populate the agency's broadband maps. These maps, as you may know, have been criticized—by consumers, carriers, and members of Congress—for failing to provide an accurate picture of where broadband is and is not across the country.

I believe we cannot manage what we do not measure. If we lack the data needed to develop accurate maps, we will not be able to target policy solutions effectively. The FCC distributes billions of dollars each year to help accelerate the build out of broadband to connect all of our communities. These funds are an especially critical part of ensuring the deployment of high-speed service in rural communities. But it's fundamentally irresponsible for the FCC to continue to send these dollars out without having a truly accurate picture of where those resources should go.

Going forward, the FCC must make it a top priority to update its maps and improve the accuracy of the information it collects. In doing so, I think the agency should mobilize all resources it has at its disposal. In other words, instead of limiting our efforts to information collected from the carriers, the FCC should explore other ways of refining and improving our broadband data. This should include a process for stakeholders to challenge data submitted to the agency. In addition, the FCC should enlist the assistance of the Universal Service Administrative Company and the agency's own field offices around the country to perform spot checks on data submitted to the agency. It also should incorporate crowdsourcing. So many Americans have stories to tell about where service is lacking in their communities. We need to develop ways to incorporate what they know and their desire to help refine our data—by developing a way for the public to participate in the improvement of our maps.

Committee on Homeland Security and Governmental Affairs
United States Senate

Post-Hearing Questions for the Record
Submitted to The Honorable Jessica Rosenworcel
From Senator Maggie Hassan

"Supply Chain Security, Global Competitiveness, and 5G"

October 31, 2019

The Honorable Jessica Rosenworcel, Commissioner, Federal Communications Commission

1. **Would you please elaborate on the ways that the FCC can facilitate the development of an open radio access network (RAN)? Specifically, what resources would the FCC need to develop testbeds for open RAN development in the United States?**

We need an approach to supply chain security that recognizes that despite our best efforts, secure networks in the United States will only get us so far because no network stands by itself. Our networks still will connect to insecure equipment abroad. So we need to start researching how we can build networks that can withstand connection to equipment vulnerabilities around the world.

One way to do this is to invest in virtualizing radio access networks—or open RAN. The RAN is the most expensive and restrictive part of the network. Today, all major components of a RAN have to come from the same vendor. There is no way to mix and match. But if we can unlock the RAN and diversify the equipment in this part of our networks, we can increase security and push the market for equipment to where the United States is strongest—in software and semiconductors. This also will give carriers around the world that are locked into upgrade cycles with a single foreign vendor a way out.

The FCC can help with this effort. First, the FCC should coordinate with other agencies to ensure no single vendor dominates networks. The FCC also should work with the Department of State and the Department of Commerce in particular to extend this approach abroad, too. Second, the FCC can encourage the development of the testbeds in the United States that bring together operators, vendors, vertical interests, and other government agencies to support these models. We can start that effort right now simply by making it a priority. Earlier this year, the FCC announced the creation of two Innovation Zones in New York City and Salt Lake City. These Innovation Zones are city-scale test beds for advanced wireless communications and network research, including 5G networks. In New York City, the Innovation Zone will support Cloud Enhanced Open Software Defined Mobile Wireless Testbed for City-Scale Deployment, or COSMOS. In Salt Lake City, the Innovation Zone will support a Platform for Open Wireless Data-driven Experimental Research with Massive MIMO Capabilities, or POWDER.

Innovation zone partner universities and the cities themselves will enable test bed development and deployment, supported by the National Science Foundation along with a consortium of telecom and technology companies. However, the FCC could encourage or require that the network deployed to support this research be compatible with open RAN architectures. Then we could do the same as we authorize additional Innovation Zones throughout the country.

2. **The FCC would need to coordinate with other government agencies to develop an Open RAN. Would you please describe the interactions the FCC has had with the relevant agencies on those efforts, and what the next steps would be to facilitate that coordination?**

Last month, the bipartisan leadership of the United States Senate Committees on Homeland Security and Government Affairs, Intelligence, Foreign Affairs, and Armed Services wrote the White House expressing concern that we do not have a coordinated, national strategy in place for 5G—and we need one. I agree.

Last year the Department of Homeland Security announced the creation of the nation's first Information and Communications Technology and Supply Chain Risk Management Task Force. This public-private partnership will develop recommendations to identify and manage risk in the global supply chain. The Task Force includes representatives from the Department of Homeland Security as well as experts from the Department of Defense, Department of Treasury, General Services Administration, Department of Justice, Department of Commerce, Office of the Director of National Intelligence, and the Social Security Administration. In addition, there is expertise from industry, with representatives from communications carriers, equipment manufacturers, and cybersecurity companies.

It's an impressive list—but the FCC does not have a seat at the table. It was left off the executive committee of the Task Force. Leaving the agency with primary oversight over communications out is neither prudent nor wise—especially because we have ongoing proceedings that speak directly to the issues covered by the Task Force.

The FCC should be added to the executive committee of the Task Force. We should be working together to develop a common approach to 5G security.

3. **Both licensed and unlicensed spectrum will be critical to unlocking the full potential of 5G and the Internet of Things for the public. The FCC has begun proceedings on unlicensed spectrum in the 6 GHz band, and on shared commercial use in the 3.5 GHz band. However, as you noted in your remarks, additional mid-band spectrum is necessary for a functional 5G system, especially for rural deployment of 5G technology. There are multiple competing proposals in front of the FCC right now concerning what to do on the 3.7 – 4.2 GHz band ("C-Band"). I would urge you and your fellow commissioners to carefully consider the proposals in front of you, and evaluate them on how they protect taxpayer dollars and respect that spectrum is a public resource. How will the FCC ensure that the mid-band spectrum that the U.S. allocates for 5G usage is**

a standard-driver globally in the face of differing European and Chinese spectrum allocation?

It is important that we do not limit our discussion about security to network equipment. We need to go beyond discussing these problems and get to what is fundamental—and that is spectrum. By bringing the right airwaves to market, we can help broaden the market for secure equipment.

On that front, the FCC has work to do. Its early efforts to support 5G wireless service have focused on bringing only high-band spectrum—known as millimeter wave—to market. These airwaves have significant capacity, but also real propagation challenges. As a result, commercializing them is costly—especially in rural areas. This means our early 5G spectrum policy could create 5G haves and have-nots, deepening the digital divide that already plagues too many rural communities nationwide.

This sets us apart from most countries in the world, which are looking to mid-band spectrum for their early 5G wireless deployments. While this spectrum has less capacity than millimeter wave, its signals travel further. That means deployment is more feasible in more places because fewer terrestrial facilities are required to make it work.

Our failure to act early on mid-band spectrum has security consequences. In many of these bands, there is only one Chinese vendor offering equipment. That means countries building their 5G networks using these airwaves do not have a competitive choice for secure equipment.

In the United States we have unique skill and scale. That means where deployment takes place here, vendors follow. So it is time for the FCC to make it a priority to make mid-band spectrum available, too. If we can do that, our carriers will build there and more vendors will compete to offer service. And when we expand the market for secure equipment at home, it also grows abroad.

To this end, I have advocated for expediting the 3.5 GHz band auction. Comparable airwaves are being deployed abroad for new 5G service and I believe the United States should act fast to ensure its global leadership in this band. It is also necessary to identify a path forward to expand opportunities for terrestrial use for 5G service in the 3.7 – 4.2 GHz band, as you suggest.

Committee on Homeland Security and Governmental Affairs
United States Senate

Post-hearing Questions for the Record
Submitted to Hon. Jessica Rosenworcel
From Senator Kyrsten Sinema

"Supply Chain Security, Global Competitiveness, and 5G"

The Honorable Jessica Rosenworcel, Commissioner, Federal Communications Commission

1. **The FCC has a long history of bringing telehealth services to patients in rural areas. Telehealth has been particularly beneficial to veterans in rural areas, specifically those suffering from posttraumatic stress disorder who can be uncomfortable travelling long travel distances.**

   In Arizona, providers are utilizing telehealth to provide veterans' health care that is accessible, flexible, and patient-centered. However, veterans in underserved or unserved parts of the state face significant challenges to access telehealth services. While I am pleased to see the opportunities that telehealth services provide for veterans, I am concerned that not all patients in Arizona can use these services because of lack of access to wireless at home.

   What is the FCC doing to support innovation in telehealth and also ensure that veterans in rural areas with limited access to broadband are not left behind in the race to 5G?

   The healthcare industry is challenged by both high costs and limited access, and advances in 5G can help address both these issues. But this will only happen if the benefits of 5G are made available to all Americans—including Americans in our most rural areas, where the business case for deploying 5G is hardest.

   The FCC has long had a Rural Health Care program, which is comprised of two sub-programs – the Telecommunications Program and the Health Care Connect Fund. In combination, these sub-programs provide funding to eligible health care providers for telecommunications and broadband services necessary for the provision of health care. In addition, earlier this year, the FCC kicked off a rulemaking on a new Connected Care Pilot Program. Through this connected care effort, the agency would be seeking to better understand the nexus between patient connectivity to their health care provider and health outcomes. The agency's proposal is specifically targeted at low-income Americans and veterans. As this effort moves forward in the next year, I am hopeful that it will generate meaningful data to inform policymakers in the future.

Finally, the RAY BAUM's Act of 2018 required the FCC to "submit to Congress a report on promoting broadband Internet access service for veterans, in particular low-income veterans and veterans residing in rural areas." Our report found that many veterans still lack access to fixed broadband, mobile broadband, or both. Barriers to access include lack of deployment where they live, price, and in some cases, digital illiteracy. Ensuring all veterans enjoy the benefits of broadband access is critical, especially because this may be a population especially primed to benefit from new connected care initiatives.

2. **The May 2019 FCC Report on Broadband Deployment in Indian Country noted approximately 47 percent of houses on rural Tribal lands have access to broadband. As you know, Educational Broadband Services (EBS) resides in the mid-band spectrum, in the 2.5GHz band and has help foster programs that tackle the homework gap and digital divide by providing spectrum for broadband services. In Arizona, the Havasupai Tribe uses EBS channels for wireless routers for their members to take online classes. The Tribe was recently granted four new EBS channels that they indent to use for telemedicine.**

   In 2018, the FCC began a process to consider updating the framework for licensing EBS spectrum in the 2.5 GHz band. The proposed rule included priority filing windows for Tribes to apply for EBS licenses before issuing licenses for any remaining spectrum through auction.

   First, I want to thank the Commission for establishing a Tribal Priority window for new EBS license issuance for Tribal National in the final rule. This decision provides Tribes with the opportunity to expand rural broadband, accelerate 5G deployment, close the digital divide, and bridge the homework gap.

   It is critical that we work with tribal entities to determine the length of the priority filing window. That is why I sent a letter to Chairman Pai urging the FCC to open the priority filing window for Tribes for 180 days for education and application purposes.
   It is my understanding based on information from Tribes in Arizona that 180 days is sufficient to ensure Tribes have the opportunity to learn about the logistics of application to EBS spectrum prior to the opening of the priority filing window.

   Has the Commission determined when the filing window will open and for how long it will be open for?

   The Rural Tribal Priority Window will open on February 3, 2020, and it will be open for 180 days.

   If not, how will the agency work with tribal entities to ensure the window time is sufficient?

The FCC has determined when the filing window will open and for how long it will be open. But we still have a long way to go to honor our federal trust responsibility to Tribal communities that have been impacted by the FCC's decisions. That's why, last year, I called on the FCC to update the Commission Statement of Policy on establishing government-to-government relationship between the agency and federally-recognized Tribes. This document has not been revisited since it was adopted more than a decade and a half ago. It is time to take on this task and do it in conjunction with resolving longstanding issues around infrastructure deployment. In doing so, we can set a clear and updated course for FCC policy while also giving substance to Tribal self-determination.

3. **According to a report from the Defense Innovation Board, 5G has the ability to enhance Department of Defense decision-making and strategic capabilities from the enterprise network to the tactical edge of the battlefield. Has the FCC been engaged with the DOD regarding DOD current and future needs related to 5G technology?**

In the first instance, those engagements happen through the Chairman's Office or through staff-to-staff discussions on specific spectrum bands that require coordination. But, as the Defense Innovation Board recognized, 5G ecosystems of technology can both "revolutionize DoD operations" and also "present[] a serious potential risk for DoD going forward." That means more meaningful engagement between the FCC and the DoD is critical. At a minimum, close coordination with both DoD and the National Telecommunications and Information Administration will be important to clear and reassign spectrum below 6 GHz that will be important to both commercial and government 5G use cases.

4. **How does the FCC coordinate with the National Telecommunications and Information Administration (NTIA) and the DOD on spectrum allocation and management for changing DOD priorities? In particular, what roles do the FCC and NTIA perform related to DOD actions to share, clear, or request different spectrum? How long do these actions typically take?**

Growing demands on our airwaves suggest we need new and more efficient ways of addressing spectrum allocation. Federal authorities have substantial spectrum assignments. After all, critical missions throughout the government are dependent on access to our airwaves.

Our traditional processes for repurposing federal spectrum essentially involve three steps: clear, relocate, and auction. But this three-part command that has worked well in the past may work less well going forward. Just as in the commercial sector, more government functions than ever before are traveling over our airwaves and it is growing harder to find spectrum for federal relocation.

More recently, we have explored sharing of federal and commercial spectrum resources. This is an exercise in innovative thinking, and its success depends on the development of new dynamic databases and bi-directional sharing.

These efforts are still worth pursuing. But we also need new approaches—one that will facilitate federal repurposing better than our old three-step process. We should consider developing a series of incentives to serve as the catalyst for us to identify more spectrum for relocation. For example, what if we were to financially reward federal authorities for efficient use of their spectrum resources? What if they were able to reclaim a portion of the revenue from the subsequent reauction of their airwaves? Would they make new choices about their missions and the resources they need to accomplish them? I believe this is an idea worth exploring.

5. **Does the federal government have a Federally Funded Research and Development Center or a University Affiliated Research Center related to FCC, NTIA, and DOD coordination regarding 5G and 5G technology? If not, could such a center be beneficial?**

Various federal efforts are facilitating research and development of 5G and 5G technology. For example, the National Science Foundation's Platforms for Advanced Wireless Research has been cited as an example of how the U.S. is leading the way in wireless technology innovation. The program's initial testbed sites have been named as the FCC's first-ever Innovation Zones for spectrum research and development. In addition, the Department of Defense's National Spectrum Consortium is funding research into 5G and 5G-based technology, and is compromised of leading technologists, engineers, scientists, manufacturers, and program managers from industry, academia, and government. The Networking and Information Technology Research and Development Program's Wireless Spectrum Research and Development Interagency Working Group coordinates federal spectrum-related research and development activities. Finally, the National Institute of Standards and Technology also is funding early research related to 5G and advanced wireless communications.

Questions for the Record- Senator Amy Klobuchar
1-15-20 Industries of the Future Hearing

<u>Question for Commissioner Rosenworcel, Federal Communications Commission (FCC)</u>:

In November, the FCC barred the use of universal service funds for the purchase of 5G equipment and services from companies that pose a national security threat, such as Huawei and ZTE. You have emphasized the need for effective action to ensure 5G security.

- **In your view, what more should be done to address the security threats posed by equipment from these companies?**

I believe we need a comprehensive national plan with a fully coordinated interagency response to meet the 5G supply chain challenge. Here are three ideas it should include.

First, we need an approach to supply chain security that recognizes that despite our best efforts, secure networks in the United States will only get us so far because no network stands by itself. Our networks still will connect to insecure equipment abroad. So we need to start researching how we can build networks that can withstand connection to equipment vulnerabilities around the world. One way to do this is to invest in virtualizing radio access networks—or open RAN. The RAN sits between your device and a carrier's core network. It is traditionally the most expensive and restrictive part of the network. To this end, right now all major components of a RAN have to come from the same vendor. There is no way to mix and match. But if we can unlock the RAN and diversify the equipment in this part of our networks, we can increase security and push innovation in the market for equipment to where the United States is strongest—in software and semiconductors. This also will give carriers around the world that are locked into upgrade cycles with a single foreign vendor a way out. The FCC can help by developing testbeds in the United States that bring together operators, vendors, and other commercial and government interests to support open RAN models. We can even build this into our ongoing efforts to authorize city-wide 5G testbeds in New York and Salt Lake City.

Second, we need to survey our network operators and identify where untrustworthy equipment is currently present. We lack a full national accounting of insecure equipment in existing networks and developing a plan to fund replacement, as contemplated by the United States 5G Leadership Act, requires that we start one as soon as possible. Moreover, when we do the FCC should identify the steps it can take to secure the 5G supply chain beyond just the universal service program.

Third, with 5G we are moving to a world with billions of connected devices around us in the internet of things. We need to adjust our policies now to ensure this future is secure. After all, the equipment that connects to our networks is just as consequential for security as the equipment that goes into our networks.

Here is what that could look like. Every device that emits radiofrequency at some point passes through the FCC. If you want proof, pull out your smartphone or take a look at the back of any computer or television. You'll see an identification number from the FCC. It's a stamp

of approval. It means the device complies with FCC rules and policy objectives before it is marketed or imported into the United States. This routine authorization process takes place behind the scenes. But the FCC needs to revisit this process and explore how it can be used to encourage device manufacturers to build security into new products. To do this, we could build on the National Institutes of Standards and Technology draft set of security recommendations for devices in the internet of things. This effort specifies the cybersecurity features to include in network-capable devices, whether designed for the home, hospital, or factory floor. It covers everything from device identification, device configuration, data protection, access to interfaces, and critical software updates. In other words, it's a great place to start—and we should do it now.

House Energy & Commerce Subcommittee on Communications and Technology
"Oversight of the Federal Communications Commission"
October 25, 2017
Questions for the Record for
FCC Commissioner Jessica Rosenworcel

The Honorable Brett Guthrie

1. **I understand that NHTSA has an open rulemaking on the matter of V2V communications and is coordinating with the Commission on whether or how to share the spectrum currently allocated to Intelligent Transportation Systems (ITS) in the 5.9 GHz band. Are you willing to commit to working with NHTSA and other stakeholders on this issue to ensure the band remains available for ITS use in the future, and free from in-band or out-of-band emissions from other potential users?**

Last year, the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) initiated a rulemaking that proposed to require all light vehicles to be equipped with V2V communication technology. While this proceeding remains pending, I understand it was removed from the Office of Management and Budget's list of regulations actively under consideration.

Nonetheless, the FCC, in close coordination with the Department of Transportation and the Department of Commerce, continues to move forward to update and refresh the record on the status of potential sharing solutions between unlicensed devices and Dedicated Short Range Communications (DSRC) systems operating under the Intelligent Transportation Service (ITS). That process includes a three-phase test plan, with collaborative testing by the FCC, the Department of Transportation, and the National Telecommunications and Information Administration (NTIA). Through a record refresh and vigorous—but timely—testing of prototypes, I anticipate that we can develop a pathway forward that protects DSRC safety-of-life functions while promoting innovation and expanding the unlicensed services that American consumers seek. I support these collaborative efforts, and I commit to continuing to work with NHTSA and other stakeholders on this issue.

2. **There are critical infrastructure industries like electric utilities whose wireless needs are absolutely paramount when it comes to reliability and freedom from interference, as drastic consequences can follow when their networks are disrupted by outside users. Are you willing to work with utilities on how best to harden their networks, and is there anything you can share on work you've already been doing to meet their wireless reliability needs?**

Across the board, FCC policies should support reliable and resilient communications service. Moreover, the agency should be mindful of the consequences of its policies on critical infrastructure providers that rely extensively on communications for continuity of service. To this end, I have called on the FCC to study the impact of Hurricanes Harvey, Irma, and Maria on network recovery and in its wake develop a plan for fixing any vulnerabilities we identify.

Moreover, I support past efforts of the FCC's Communications, Security, Reliability, and Interoperability Council (CSRIC) to develop a series of best practices that promote reliable networks, as well as the Wireless Network Resiliency Cooperative Framework, which builds upon the CSRIC recommendations. Recently, the agency sought input through this council with respect to security issues for new 5G networks. I am hopeful that practical security and reliability practices will result—including ones that take into consideration the impact of these new networks on infrastructure industries dependent on communications.

The Honorable Brett Guthrie

1. When it comes to describing the Commission's work within global for a such as the ITU or others, what role do you believe the Commission should play as an influential voice on spectrum policy and connectivity? This could be in relation to other US agencies and foreign policy makers or relative to domestic and foreign stakeholders.

Historically, the United States government—led by the Department of State and supported by the policy and technical expertise of the Department of Commerce and the Federal Communications Commission—has played an important role shaping international frameworks for spectrum and connectivity policies. We have led the world with our support of innovation and competition while highlighting that these policies are compatible with a commitment to human rights and consumer protection.

I believe that continued US advocacy on the global stage is important. To this end, I believe the FCC should continue to play a role in spectrum and connectivity policies at the International Telecommunication Union and other comparable international fora. Note that while the Department of Commerce—through the National Telecommunications and Information Administration—is the primary coordinator for federal spectrum, spectrum matters involving commercial use, as well as use by local and state authorities, is uniquely subject to the oversight of the FCC.

Accordingly, I believe the FCC should coordinate with other federal authorities and interagency committees on international telecommunications matters. At a practical level, this means participating in US delegations and leading US participation in international conferences, assisting with preparatory efforts, advising on the status of FCC actions, helping with the negotiation and implementation of telecommunications trade agreements, and conducting economic, statistical, legal, and technical studies to support the development of positions and policies, among other things.

In addition, I believe the FCC should engage with industry interests and other non-governmental stakeholders. This can be accomplished in a variety of different ways. The agency can establish external advisory committees pursuant to the Federal Advisory Committee Act. It also can seek input through solicitations published in the Federal Register. It also can develop more informal vehicles for public participation, provided they offer all stakeholders an equal opportunity to give input and share their perspectives. Consistent with this approach, on June 9, 2016, the FCC rechartered its World Radiocommunication Conference Advisory Committee to provide advice, technical support, and recommend proposals for the ITU's upcoming 2019 World Radiocommunication Conference. This committee—which is composed of public and private sector members—is focused on the set of spectrum issues identified in the WRC-19 agenda with the goal of identifying US priorities and objectives. I fully expect that the work of this committee will help the FCC formulate meaningful recommendations.

In sum, I believe the upcoming ITU Plenipotentiary and World Radiocommunication Conferences are important opportunities for the US—supported by the FCC—to forcefully

advocate for ITU efforts to bridge the digital divide, allocate global spectrum resources, and support telecommunications development around the world. I believe it is also possible for the US to accomplish these goals while ensuring that ITU policymaking stays within the scope of its mandate.

The Honorable Yvette Clarke

1. The FCC's efforts to expand broadband access in rural areas are appropriate, but the Communications Act also mandates that the Commission help low-income communities get access to broadband. A recent Pew Research Center survey on internet use found that more than 19 percent of Americans who do not use the internet cite the expense for internet service or a computer as the reason.

Given the clear instructions Congress gave to the Commission in the law, and the facts on the ground, it's vexing to me that the FCC would push struggling families to the back of the line when it comes to broadband access. Specifically, Mr. Chairman, your proposal to strip phone or internet service from 8.3 million Americans is draconian.

a. Can you explain the problems faced by low-income Americans struggling to afford internet access and why cutting 70% of providers, capping the program, or cutting out fully subsidized service would be devastating to Americans using the Lifeline program to get back on their feet?

I do not support the proposal by the Federal Communications Commission that would cut 70% of existing users from the Lifeline program.

The Lifeline program got its start in 1985, when President Reagan was in the White House and nearly all communications involved a cord and a jack in the wall. When it began, it supported the cost of basic telephony in low-income households. The idea was simple—without the ability to call others, it would be difficult to secure jobs, seek out healthcare, pursue education, or seek assistance in a disaster. Over time, the FCC updated this program to reflect the current state of technology. To this end, more than a decade ago it added wireless service. Later, the FCC sought to add broadband, recognizing that internet access is the dial tone of the digital age.

Unfortunately, the agency's most recent proposal does not continue this course. Instead of modernizing the program, it proposes to slash it from front to back. This will harm millions who presently rely on the program. That includes nearly 2.2 million elderly who depend on Lifeline for their healthcare and security as they age on limited incomes. It includes 1.3 million veterans who rely on Lifeline to reacclimate to civilian life. It includes 500,000 people on Puerto Rico who are still recovering from last year's devastating hurricane season. It also includes those who seek assistance from domestic violence programs and homeless youth—and many other similar groups that rely on low-cost communications services for safety.

It does not have to be this way. It is possible to address concerns about the Lifeline program through more thoughtful reform. All carriers participating in the program should be subject to regular audits. In addition, the FCC should consider increased penalties for those carriers that fail to follow program rules—including debarment prohibiting future participation. It is also important to note that key reforms are already underway, including the introduction of a national verifier system in six states. This should be expanded nationwide as soon as feasible.

I believe that it is worth the effort to modernize and improve the Lifeline program. But I am concerned that the proposal before the agency is not only cruel, it is at odds with the FCC's statutory duty to support service to "all regions of the Nation, including low-income consumers."

b. I share your concern about the Homework gap. How does the FCC's assault on Lifeline affect the homework gap, and how can better help our students compete?

Today, seven in ten teachers assign homework that requires broadband access. But data from the FCC show that as many as one in three households do not subscribe to internet service. Where those numbers overlap is the Homework Gap. According to the Senate Joint Economic Committee, the Homework Gap is real. By their estimate, it affects 12 million children across the country.

The Homework Gap harms students in rural areas and urban areas—wherever they lack access to the reliable internet service that is now necessary for so much nightly schoolwork. That means students are sitting in fast food restaurants and writing their papers with fries, just to get a free Wi-Fi signal. It means there are parents who have to make elaborate plans to head to the homes of friends and relatives just to ensure their children have a place to get online for homework. It means too many students sitting in the school parking lot well after the final bell has rung because it is the only place they can get a reliable connection.

We can applaud the grit of those who find a way to cobble together a connection for schoolwork. But we should also do better—and the Lifeline program could help. If it was properly reformed and refocused on broadband, it could assist millions of students in low-income households get the internet access they need for basic homework.

In 2016, the FCC sought to make this happen when it updated the Lifeline program. Pursuant to that effort, wireless services eligible under the program would feature devices with Wi-Fi chips for internet access and permit tethering for use by other devices, such as a computer. Unfortunately—over my objection—the FCC rolled back these changes in 2017. This is regrettable. I believe the FCC needs to reconsider this course. Were we to do so, it would help bridge the Homework Gap. It also would help ensure that in the digital age no student will lack the skills necessary for full participation in modern civic, social, and economic life.

Responses of Commissioner Jessica Rosenworcel
House Appropriations Subcommittee on Financial Services and General Government
April 3, 2019

Questions for the Record Submitted by Chairman Quigley

Repack

Question: Chairman Pai, to accommodate its 2016 broadcast incentive auction, the FCC recently completed the first of ten phases to repack nearly 1,000 full power broadcast tv stations across the country. These are stations that received no benefit from the auction and wish to continue to serve their viewers. Can you provide an update on how that first phase went, including the number of station moves that were successfully completed, as well as any delays? What were the causes of any delays?

Question: Chairman Pai / Commissioner Rosenworcel, based on the FCC's experience in the first phase of the transition, do you have concern that additional stations will not be able to complete moves prior to their assigned phase deadlines?

Based on experience with Phase 1 and Phase 2 relocation, I am confident that stations will be able to complete their moves prior to their assigned deadlines. The FCC is receiving regular feedback from broadcasters about the repacking process on the ground and in the field. If, however, the agency concludes that broadcasters will not be able to meet existing deadlines due to unexpected delays, including lack of available tower crews or special weather challenges, the FCC will work carefully with stations to identify solutions that help keep the process on track.

Question: Chairman Pai, we have heard concerns about both the lack of availability of tower crews and equipment that may contribute to further delays. Do you share these concerns?

Question: Chairman Pai / Commissioner Rosenworcel, viewers across the country rely on access to broadcast television not only for entertainment, but as a lifeline in times of emergency. If a broadcast station through no fault of its own cannot transition to its new frequency prior to its assigned phase deadline, do you believe it should be forced off the air? If not, how will the FCC continue to address these issues?

When emergencies occur, especially weather disasters, we turn to broadcasters for news and information. They play an important role in both local and national emergency response. That is why the FCC will need to be flexible and provide as many options as possible to help ensure that the broadcast television station transition is smooth. To avoid having stations go off the air, the FCC needs to use the full range of tools it has at its disposal, from supporting interim antennas to granting phase changes when stations need to adjust the timing of their transition. I am hopeful that if the agency does so, no station will be in jeopardy of unexpectedly going off the air.

Suicide Hotline Improvement Act

Congress passed the National Suicide Hotline Improvement Act (P.L. 115-233) last year, which tasks the Federal Communications Commission with studying the feasibility of transitioning the 1-800 number to a single-use N11 code. Furthermore, it asks the FCC to consider recommendations surrounding improved infrastructure and operations (3)(a)(2)(B)(ii)(II). Given that the LGBTQ population is at a heightened risk for suicide, I am requesting a status update on the following:

Question: What is FCC doing to address the concerns raised by over 100 commenters to its open docket to consider the need for specialization of services for LGBTQ populations in relation to implementation of the Hotline Improvement Act?

The public comment system is vitally important because it is how citizens make their voices heard in Washington. In this proceeding, as in all others, the FCC will need to review carefully the comments it has received. As you note, a significant number of comments have been filed in this docket asking the agency to consider the need for specialized services for LGBTQ populations as part of its report pursuant to the National Suicide Hotline Improvement Act. I believe the FCC needs to fully address these comments regarding services for the LGBTQ community in its upcoming report, which under law must be completed by August 14, 2019.

Question: Has FCC considered the mandatory training of counselors for identifying and responding to people within high-risk groups, or the diversion of calls to organizations with particular expertise in serving these communities?

The FCC has not yet completed its report pursuant to the National Suicide Hotline Improvement Act. However, I believe this topic should be addressed in the report.

Question: When does FCC anticipate making final determinations? Will there be further opportunity for public comment?

Under the National Suicide Hotline Improvement Act, the FCC is required to produce a report by August 14, 2019 addressing the feasibility of designating a 3-digit dialing code to be used for a national suicide prevention and mental health crisis hotline. To this end, on November 8, 2018, the agency issued a Public Notice seeking stakeholder input on the issues raised by this law. While formal comments were due on December 10, 2018, the agency is still accepting ex parte comment filings from interested parties. My office also remains open to meeting requests to discuss this issue or any other regarding the report.

Reassigned Number Database

Question: Chairman Pai - Following up on the Commission's final rule on the reassigned number database to help reduce robocalls, it would be helpful to know your timeline. When do you plan to issue the Request for Proposals to implement the database? Do you have a timeline to get it up and running?

Questions for the Record Submitted by Congressman Graves

Internet Protocol (IP) Captioned Telephone Service

The FCC's IP CTS program is an ADA service for consumers who are hard of hearing. I have been contacted by consumers and advocates in the hearing loss community with questions about FCC's proposed changes to this program.

Proposal exist currently to reform the program, adjust rates, and authorize alternative technologies, including automated speech recognition (ASR).

Question: What does the FCC plan to do to ensure ASR can perform as least as well as existing services today, or deliver functionally equivalent service before certifying any ASR provider?

I believe it makes sense to include automatic speech recognition in our framework under the Americans with Disabilities Act. With advances in technology, it may now be possible for automated systems to substitute for traditional Internet Protocol Captioned Telephone Service (IP CTS), which requires human intervention via communications assistants. Moreover, it may provide an experience for users that is comparable to older forms of IP CTS that deliver functional equivalency, as required under the law. Unfortunately, however, the FCC rulemaking on this subject from June 7, 2018, authorized automatic speech recognition without clearly articulating the service quality standards that hard-of-hearing users should expect. I thought this approach was backwards. As a result, I concurred in the decision. Going forward I want to see the agency acknowledge that with functional equivalency as our mandate, we should be providing more detailed direction for how it can be achieved.

Question: How will you ensure that consumers continue to have access to this critical ADA service?

The FCC needs to closely monitor the IP CTS market and make adjustments to agency policies, as necessary, to ensure that consumers receive functionally equivalent services consistent with the Americans with Disabilities Act.

Question: What has the FCC done to ensure that the full impacts of proposed rate changes are taken into account?

The FCC has a pending rulemaking on this subject. As it weighs the merits of changes to its policies, I believe the agency needs to consider the impact on consumers.

Educational Broadband Service

The Educational Broadband Service licensing and leasing regime has provided opportunities for fixed wireless systems and broadband access in many rural areas where schools, colleges and small rural operators have built these systems. The FCC halted new educational applications for these licenses in 1995. The FCC has recently proposed filing

windows to allow Educational Institutions and Tribal Nations to apply for new licenses, making remaining licenses and any licenses with competing applications available via auction.

<u>Question:</u> When does the agency intend on completing this rulemaking?

Decisions regarding the completion of this rulemaking lie with the Chairman of the agency. However, I support moving with urgency to ensure more efficient and effective use of the Educational Broadband Service spectrum—both for educational and commercial uses.

The Educational Broadband Service constitutes the single largest band of contiguous mid-band spectrum below 3 GHz and is prime spectrum for next-generation mobile services known as 5G. Significant portions of this band currently lie unused across the United States, including in rural areas. One year ago, the FCC adopted a rulemaking seeking comment on modernizing the band for both educational and commercial uses. Since then, the United States has fallen further and further behind its global peers when it comes to making available mid-band spectrum for commercial use for 5G. This is a problem—if we want to serve everywhere in this country with next-generation mobile, we are going to need a healthy mix of airwaves that provide both coverage and capacity. This proceeding is ripe for action—and I support exploring creative solutions that honor the history of the Educational Broadband Service and also ensure it has an effective future.

Children's Television Act Modernization

The FCC, implements and enforces the Children's Television Act of 1990. Almost 30 years after Congress passed that law, programming is consumed in ways the law did not contemplate and does not regulate.

FCC rules have not adapted to these changes over time, with the FCC's children's television rules last being revised 13 years ago.

Currently the FCC does not regulate children's programming or advertising on the internet, creating a regulatory imbalance.

I understand the FCC is currently in the process of reviewing and modernizing those rules to account for these new developments.

<u>Question:</u> Chairman Pai, when do you expect the FCC to modernize children's television advertising rules to level the playing field and preserve the safe environment Congress envisioned for our children?

Wireless Rural Broadband

Recently in Georgia, a pilot project was launched that uses vacant TV spectrum to deliver broadband to remote areas where fiber networks remain unavailable. My understanding is

that there are a number of regulatory barriers preventing widespread deployment of these technologies.

I understand you recently finalized two orders related to this issue, and that a Further Notice of Proposed Rulemaking (FNPRM) would address issues like the connection of school buses and precision agricultural technologies.

Question: Does the Commission plan to issue a FNPRM to clear up outstanding regulatory barriers and if so when?

While white spaces innovation began here in the United States, in recent years the use of this technology has advanced faster in other countries. At present, there are 20 television white spaces projects worldwide that are serving 185,000 users. However, in the United States, deployment of this technology has stalled. As you suggest, this is due, in part, to outstanding regulatory issues.

Decisions regarding when and how these issues are addressed lie with the Chairman of the FCC. Last month the FCC adopted an order that took steps to improve the accuracy and reliability of white space databases. But I believe that much more work needs to be done to address remaining regulatory barriers. To this end, I believe the FCC should resolve outstanding petitions for reconsideration involving white spaces activity. In addition, the agency should explore further rule changes to facilitate connectivity. If we do so thoughtfully, I believe we can expand opportunities for this technology and increase the likelihood that white spaces can support broadband service in communities across the country, including rural areas.

Questions for the Record Submitted by Congressman Stewart

Broadband Maps

It is no secret that many members of this Congress and other third-parties have serious concerns about the Commission's broadband mapping data. This problem is of particular concern for this committee because, if the Commission's broadband maps are unreliable, the billions of dollars in loans and grants you allocate for rural broadband expansion may not be properly targeted. Your funding allocation process may overlook areas with no broadband access that are marked as covered on your map, and 2) waste taxpayer dollars by overbuilding in other areas.

Question: Do you share the concerns about the accuracy of the FCC's broadband mapping data? If so, what are you doing to fix it?

Yes. I believe the FCC's broadband mapping data is seriously flawed. I have testified about these problems before Congress. I have issued dissenting statements in response to FCC decisions involving mapping. I have given speeches discussing the serious limitations of the FCC's existing process for collecting broadband deployment data.

My efforts, however, have not been limited to criticism. I have suggested a variety of ways the agency can improve its systems of data collection and increase the accuracy of its mapping efforts.

First, the agency should use the resources at its disposal in the dozen FCC field offices across the country. At a minimum, engineers in these offices could perform spot checks of data submitted through the traditional Form 477 process, identifying problems and confirming deployment.

Second, the Universal Service Administrative Company, which distributes universal service funding from the FCC, has committed to testing how the funds they parcel out are used by the carriers that receive them to extend service in rural areas. Instead of performing tests after the fact, this organization should be put to work to run tests now. By doing so, we can better understand where deployment has and has not occurred and as a result, where the FCC should focus its policy efforts.

Third, the FCC has a speed test application that is available for use on mobile devices. It has been downloaded more than 200,000 times. This application provides information about speed and location that the agency should incorporate into its data-gathering efforts, including its Form 477 process.

Fourth, the FCC should embrace crowdsourcing. No matter who you are or where you live, you probably have a story to tell—about how service stops short of your street, about how speeds are not what are commercially reported, or about how you're still waiting for deployment that was promised long ago. It's time to use the wisdom of the crowd to get our maps right. I know from experience that people across the country want to help and participate because over a year ago I set up an e-mail in-box at broadbandfail@fcc.gov to collect data informally. Hundreds of people wrote in to offer ideas, complain, and have their say. What I took from this experience is that the best broadband map is not going to be built by one authority in Washington, but instead is going to be built by all of us. Consequently, I believe it is time for the FCC to explore crowdsourcing and other ways to improve its data so that people across the country can trust our maps and our efforts to deploy limited resources to help extend the reach of broadband services to every community across the country.

Form 477

The FCC Form 477 broadband data collection process, marks an area as having broadband access if the provider serves or could serve that area.

<u>Question:</u> Are you considering revising Form 477 to focus the data solely on areas that are served and remove the "could serve" question so as not to inflate the numbers?

The FCC has an outstanding rulemaking from 2017 that seeks comment on ways it should update its Form 477 data-gathering efforts. I believe the FCC should complete this rulemaking and in doing so explore how to improve the "could serve" question. I share your concern that this inquiry may inflate the deployment data.

<u>Question:</u> Will you incorporate your subscription data as well as third-party data sources into your decision-making until you can improve the accuracy of your broadband access data?

As the FCC considers ways to improve its data collection and mapping efforts, I believe it is important for the agency to take into account adoption data. It also will be important for the agency to verify its data with other data sources, including via crowdsourcing. Finally, the FCC should commit to publishing machine-readable files so that interested parties can leverage FCC broadband data to develop their own research, analysis, and mapping efforts.

<u>Questions for the Record Submitted by Congressman Amodei</u>

Authorization of use of 3.5GHz CBRS bands

Chairman Pai and Commissioner Rosenworcel: As you know, a key to winning the race to 5G is to speed the adoption of LTE Advanced and 5G NR technologies in U.S. mid-band spectrum. A large and diverse group of companies had hoped that commercialization of the 3.5 GHz Citizens Broadband Radio Service (CBRS) band would be concluded by the end of 2018

<u>Question:</u> Can you please explain the delay and lay out the timeline for realizing this exciting public-private partnership?

I am concerned about recent FCC decisions that have led to a delay in the auction and commercialization of the 3.5 GHz band.

Over three years ago the FCC recognized that our traditional spectrum auctions needed an update—and that the 3.5 GHz band was the perfect place to test a new framework. Instead of relying on the traditional binary choice between licensed and unlicensed, the agency adopted an unprecedented three-tiered model for spectrum sharing and management. It included a mix of service rules designed to lower barriers to entry, cultivate new sources of investment and competition, and create new opportunities to reach rural and hard-to-serve areas of the country.

This had all the hallmarks of a wild success. As a result of its early efforts, the FCC saw interest in the 3.5 GHz band auction from far and wide. In addition to familiar carriers, we had interest from entities that support industrial operations and wanted to use this spectrum for intelligent manufacturing, power generation and distribution, and healthcare. Our record supported its use for advanced inspection and sensor technologies, including aerial drones, terrestrial crawlers, and robotics. The American Petroleum Institute expressed interest in its use for updating drilling operations. The Port of Los Angeles wanted to explore its use for sharing shipping data. Rural interests saw a unique opportunity to bring more service and more competition to remote areas of the country that are too often left behind.

This was exciting. It was ready to go. Millions of dollars had been invested, more than 200 experimental authorizations had been granted, and protocols regarding operations, interoperability, security, and device testing were underway.

However, instead of seizing this opportunity, the agency decided to retreat. Over my objection, in 2017 my colleagues decided to rethink the 3.5 GHz band framework from top to bottom and began another rulemaking to reconsider license terms. This was followed by an order in 2018. Unfortunately, this most recent order rethought some of the most creative elements in the original 3.5 GHz band framework, including changing the size and duration of licenses. Even more unfortunately, there is still work to be done to bring these airwaves to market. No auction has been scheduled, no auction rules have been developed, and no database provider has received final approval from this agency to start commercial operations.

This is unfortunate. The 3.5 GHz band is a critical part of the future of 5G. All of our recent spectrum auctions have involved millimeter wave bands that lack the coverage associated with mid-band spectrum like the 3.5 GHz band. As a result, I believe the agency now needs to do everything in its power to accelerate the auction of the 3.5 GHz band so it takes place this year.

Questions for the Record Submitted by Congressman Bishop

Fake 5G

The FCC has a history of ensuring that carriers do not mislead customers. One carrier recently started updating phones to indicate that they are connected to a "5GE" network, despite the underlying technology being an evolution of 4G LTE rather than true millimeter-wave 5G technology. Further, speed tests have found that this "5GE" service is not appreciably faster, and sometimes slower, than other carriers' 4G networks. However, true 5G service is an order of magnitude faster than 4G.

Question: Do you believe the FCC should examine deceptive marketing such as this?

I believe consumers should have accurate information about their phone service so they can make informed choices about their purchases and their use. The FCC's Consumer and Governmental Affairs Bureau has started to receive informal complaints from consumers about the use of "5GE." It is important that these complaints be processed quickly pursuant to our informal complaint procedures. In addition, the FCC should ensure that all 5G marketing complies with the agency's transparency rules in 47 C.F.R. Section 8.1, which requires any person providing broadband internet access service to publicly disclose accurate information regarding network management practices, performance characteristics, and commercial terms.

FOIA Requests

I am very troubled by reports that FOIA requests made to the FCC surrounding the public comment process for Net Neutrality repeal were deliberately ignored.

Insight into the behavior of our public officials is essential to trust in government, and it boggles my mind that information related to a public comment process—where individuals have explicitly authorized and requested that their testimony be made public—would be kept secret under an exception normally reserved for the most sensitive of communications.

Given the credible accounts of fraudulent submissions we've heard, it is important that all relevant information be available for view.

Question: What can we do to encourage the FCC's compliance with these important disclosure laws?

I agree this is a problem. When the FCC made the misguided decision to roll back its net neutrality rules, it did so based on a public record littered with issues. While millions of Americans sought to inform the FCC process by filing comments and sharing their true opinions about internet openness, millions of other filings in the net neutrality docket appear to be the product of fraud. As many as nine and a half million people had their identities stolen and used to file fake comments, which is a crime under both federal and state laws.

However, when the Office of the New York Attorney General sought the FCC's help to investigate this situation, it was rebuffed. When investigative journalists from the New York Times and BuzzFeed News sought access to the FCC's records, they too were turned away. I criticized the agency's leadership for its failure to work with our state counterparts in New York. I also dissented from the decision that denied these investigative journalists access to records that they were entitled access to under the law. Unfortunately, if you stand back and survey this behavior it seems that the FCC is trying to prevent anyone from looking too closely at the mess it has made of net neutrality. This is not right.

More recently, the agency entered into a settlement in which it paid $43,000 to yet another journalist who sought access to the agency's net neutrality records through a separate Freedom of Information Act request.

Something here is rotten—and it's time for the FCC to come clean. But that FCC has been unwilling to do so by itself. As a result, I believe Congress should step in and compel it to do so.

Questions for the Record Submitted by Congressman Crist

Commercial Space Launches

As you are aware, the number of commercial space launches has increased dramatically over the past several years. Each one of these launches requires approvals from the FCC to use certain frequencies necessary to communicate with the rocket. Unfortunately, this process was designed during an era with few commercial space launches and is not structured to support the high cadence of commercial launch seen from the United States today. It requires the FCC to issue Special Temporary Authority for each and every launch. In fact, the FCC must run through this process multiple times for each launch. This was reasonable when there were only a few commercial missions per year, but last year the United States led the world in commercial space launch and is set to do so again this year.

<u>Question:</u> The FCC had a proceeding pending since 2013 that would begin to streamline this process. Can the FCC complete this proceeding and help the U.S. continue to lead the way in commercial Space?

Decisions regarding the completion of this rulemaking lie with the Chairman of the agency. However, I supported the 2013 Notice of Proposed Rulemaking and Notice of Inquiry which started a proceeding to address the spectrum needs of the commercial space launch industry, and I continue to support efforts to ensure sufficient spectrum resources for commercial space launch operations.

<u>Question:</u> I understand that the current process requires emails to be sent manually to multiple agencies. Does your budget provide sufficient funding to automate this process?

I do not believe that our current budget proposal envisions using funds to automate this process, and the decision to do so would lie with the Chairman of the agency.

Reassigned Number Database

As you know, the issue of robocalls is a complicated one, with many companies getting sued for calling people because they don't have the correct phone number for their customer. One of the ways that the Commission is trying to prevent these types of unwanted calls is by developing a "reassigned number database." As you may know every year about 35 million phone numbers are disconnected and then subsequently made available to new consumers. Hard to believe but there isn't currently a way for a company to know that its customer has changed numbers. Back in November the FCC released its order to create a database of these reassigned numbers (https://docs.fcc.gov/public/attachments/DOC-355213A1.pdf) so companies can check to verify the numbers they are calling.

Just last week the FCC released the final rule for this order.

<u>Question:</u> Following up on the Commission's final rule released last week on the reassigned number database to help reduce robocalls it would be helpful to know your timeline. When do you plan to issue the Request for Proposals to implement the database? Do you have a timeline to get it up and running?

At the start of 2017, there were approximately 2 billion robocalls nationwide each month. That number now exceeds 5 billion each month. That is why in December 2018 I supported the FCC's decision to create a reassigned numbers database. It promises to cut down on one discrete segment of unwanted calls—those made to reassigned numbers. But in my statement attached to the FCC's decision, I observed that there is no deadline for the database's implementation, no date by which we can ensure its operation, and no time by which we can ensure consumers relief. I believe the FCC should do better. The agency should publish a specific timeline with targets for each milestone in the implementation of the database. I encourage Congress to press the agency to do so in order to keep this effort on track.

Attachment—Additional Questions for the Record

Subcommittee on Communications and Technology
Hearing on
"Accountability and Oversight of the Federal Communications Commission"
May 15, 2019

The Honorable Jessica Rosenworcel, Commissioner, Federal Communications Commission

The Honorable Anna G. Eshoo (D-CA)

1. Last fall, the FCC preempted municipalities from having a say in deploying small cell sites, the infrastructure needed for 5G. This poor policy has led to nearly 100 municipalities, public power utilities, and associations to sue the FCC over these actions (FCC 18-111 and FCC 18-133). America needs to win the race to 5G for many reasons, but it must be done equitably. You dissented, in part, from these actions. How can the FCC can ensure America's 5G leadership without steamrolling local communities?

I do not believe the Communications Act permits Washington to run roughshod over state and local authority like the FCC did in its decision to preempt municipalities from having a say in the deployment of small cell sites. Accordingly, I regret that instead of working with our state and local partners to speed the way to 5G deployment, in this decision the FCC chose to cut them out. As a result, the FCC told communities nationwide that going forward Washington will make choices for them—about which fees are permissible and which are not and about what aesthetic choices are viable and which are not—all with a cavalier disregard for the fact that these infrastructure decisions do not work the same in every part of the country.

I believe the FCC did not have to do it this way. I believe there are other approaches that are less likely to yield litigation and more likely to facilitate rapid deployment that merited consideration. To this end, I offered three fundamentals to inform our work going forward.

First, we need to acknowledge that we have a history of local control in this country but also recognize that more uniform policies can help us increase deployment in the future. To facilitate this, I believe the FCC should develop model codes for small cell and 5G deployment—but make sure they are supported by a wide range of industry and state and local officials. Then we need to review every policy and program, from universal service to grants and low-cost loans at the Department of Commerce, Department of Agriculture, and Department of Transportation, and build in incentives to use these models. In effect, we would use carrots instead of sticks.

Second, the FCC needs to own up to the impact of the Administration's trade policies on 5G deployment. As a result of our escalating trade war with China, we now have a 25 percent tax on equipment like antennas and routers, which are some of the most important building

blocks of 5G networks. This is a real cost that is diminishing our ability to lead the world in 5G deployment and it merits as much or more discussion as the sometimes theoretical cost associated with state and local review.

Third and finally, we should explore dusting off our 20-year-old over-the-air-reception device rules, or OTARD rules. These rules were designed to protect homeowners and renters from laws that restricted their ability to set up television and broadcast antennas on private property. Today OTARD rules do not contemplate 5G deployment and small cells. However, small clarifications to our rules could change that. To this end, I am pleased to report that the FCC has followed my lead on this subject and on April 12, 2019 adopted a rulemaking seeking comment on how to think anew about OTARD policies and 5G network deployment.

2. During the worst fire in California's history, Verizon throttled the data speeds of Santa Clara County firefighters, hindering their ability to communicate.

a. If the 2015 Open Internet Order wasn't repealed, could this practice have been considered a violation of the ban on "unjust and unreasonable" business practices?

If the 2015 Open Internet Order was still in place, the FCC clearly could have investigated this practice to determine whether it violated the law or FCC rules.

b. Has the FCC taken any actions to avoid a repeat of this issue in California and other parts of the country by Verizon or other ISPs?

No.

3. Under the 2015 Open Internet Order, the FCC could investigate possible violations of bright-line prohibitions of net neutrality and other "unjust and unreasonable practices."

a. Since the 2017 Restoring Internet Freedom Order, has the FCC been investigating whether ISPs are engaging in blocking, throttling, or paid prioritization practices, both as disclosed by ISPs and undisclosed practices?

No.

b. If not, would the FCC even know if "Over the past year, the Internet has remained free and open," as Chairman Pai stated on January 2, 2019?

Apart from maintaining a portal for broadband Internet service providers to file transparency disclosures—which is simply a link to the agency's filing system—the FCC has taken itself off of the field when it comes to the practices of broadband Internet providers. I believe this was one of a number of mistakes the agency made when it rolled back net neutrality.

4. The National Verifier has launched in 16 states where it lacks access to any databases for state-administered programs, such as the Supplemental Nutrition Assistance Program and Medicaid. Should an individual be informed that the National Verifier was

not able to confirm their eligibility, they could reasonably consider this a denial from Lifeline, even though they may be eligible.

a. Given these issues, what specifically is the FCC or USAC doing to ensure the National Verifier connects with state databases in the states where it has launched or where it is planning to launch, and what is the timeline to do so?

I supported the creation of a National Verifier over three years ago. That's because if properly implemented, this system would improve the administration of the Lifeline program. However, right now I have real concerns about how the National Verifier has been introduced. In too many states, it does not include all databases that can be used to confirm program eligibility. It is time for the FCC to work with USAC to honestly assess the present and future capabilities of this system. In addition, the FCC should publish a timeline for updating and enhancing the additional databases it expects to incorporate and detailing any others for which it lacks access.

b. Given the above issues regarding the rollout of National Verifier, why is the FCC pushing forward to launch in more states rather than focusing on improving connections to federal and state databases in states where National Verifier is currently deployed?

The National Verifier should make program administration and accountability easier, not harder. I am concerned about the lack of transparency regarding the National Verifier's present capabilities. Likewise, I am concerned about the lack of transparency regarding this system's expected capabilities in the future. As noted above, I believe that the first step required to remedy this situation entails the FCC working with USAC to honestly assess the present and future capabilities of this system. In addition, the FCC should publish a timeline for updating and enhancing the additional databases it expects to incorporate and detailing any others for which it lacks access.

5. As the FCC considers USTelecom's petition for forbearance from key provisions of the Telecommunications Act of 1996, what has the FCC done to consider the impact of granting this petition on (i) small and medium-sized ISP's building out the fiber networks needed for upgrading our country's wireless infrastructure to 5G and for closing the digital divide; and (ii) federal, state, local, and tribal government agencies, particularly those that will continue to rely on TDM-based telephone services through the continued availability of resale requirements?

At this time, the Chairman has not yet shared a draft decision regarding all of the outstanding issues in this petition for forbearance. But when that does occur, I will consider the impact to small and medium communications providers as well as federal, state, local, and Tribal users of telecommunications services as part of my review.

6. Should the FCC further eliminate media ownership rules as it is considering, Americans may experience a sharp reduction in the breadth and diversity of voices available in any local media market. One entity could control all broadcast TV stations, local newspapers, and radio stations. This is a direct rebuke to a fundamental value that

underpins our democracy. Please share whether you are considering such outcomes and to what degree you have concerns about the consolidation of media ownership.

The way that Americans get their news has undeniably changed. Gone are the days of waiting for the news to hit the front stoop in paper in the morning and waiting for the news via a half-hour broadcast session at night. Today we all seek out news when we want it, where we want it, and on any screen handy. But while this anytime and anywhere access to global and national information is revolutionary, it is accompanied by a paradoxical trend—a decline in local journalism and news production.

In fact, last year, the University of North Carolina School of Media and Journalism released a study detailing the stark decline of local news in rural areas. Newspapers have shuttered, and broadcast stations are increasingly owned by national companies with limited ties to the communities they serve. What is emerging are news deserts—areas of the country where national news dominates but local news is disappearing.

The FCC response to this problem has been giving a green light to further media consolidation. To this end, the agency has rolled back its rules prohibiting the cross-ownership of newspaper and broadcast entities in the same community and changes to its policies limiting the number of stations any one owner could have in a single market. While I believe some adjustment to these rules was warranted in order to reflect the modern media marketplace, I do not believe that burning them down entirely has helped with news deserts nor bolstered the principles of localism, competition, and diversity that have historically been the core of our approach to media policy under the Communications Act.

a. **Has the FCC's newly created Office of Economic Analysis provided input on the impact of eliminating media ownership rules on consumer prices in the video marketplace?**

I am not aware of specific input, analysis, or research provided by the Office of Economic Analysis regarding the impact of eliminating media ownership rules on consumer prices in the video marketplace.

7. **The FCC is considering a proposal to alter what may be considered toward the statutory maximum of five percent franchise fees (MB Docket No. 05-311). This would negatively impact the access of communities to public, educational, and governmental (PEG) programming. As I stated in my February 22, 2019 letter to the FCC, Congress clearly intended for communities to have access to PEG. The legislative history of the 1984 Cable Act explicitly states that franchise fees are only made up of monetary payments and do not include PEG contributions (H.R. Rep. No. 98-934 (1984)). Congress made its intent on this matter explicit and clear.**

a. Under what statutory authority is the FCC considering this proposal which would have the effect of including PEG contributions in franchise fees?

Under the Communications Act, franchise fees are limited to five percent of cable revenues. Moreover, the law defines "franchise fee" to include "any tax, fee, or assessment of

any kind imposed by a franchising authority or other government entity on a cable operator or cable subscriber, or both, solely because of their status as such." Recently, this congressionally-mandated limit on franchise fees was the subject of a remand from the Court of Appeals for the Sixth Circuit. Accordingly, on September 25, 2018 the FCC released a rulemaking seeking comment on the issues raised by this court decision, namely including mixed-use networks and the treatment of cable-related in-kind contributions in light of the statutory cap.

The record in response to this proceeding is extensive. More than 3500 comments have been filed with the FCC. Moreover, Members of Congress, mayors, state legislators, and city councils have written the agency in droves impressing upon me the need to consider the impact of our policies on PEG channels as we navigate the issues raised in this court decision. I believe, like so many who have made their voices heard in this proceeding, that the FCC needs to do everything it can within its statutory authority in order to ensure that PEG channel programming can not only survive, but thrive.

The Honorable Jessica Rosenworcel, Commissioner, Federal Communications Commission

The Honorable Yvette D. Clarke (D-NY)

1. **It is wonderful to see how technology has broken down barriers for people with disabilities, but I am concerned this same technology can introduce new challenges for consumers. As the FCC considers moving to fully Automated Speech Recognition or ASR, I am concerned that fully automated ASR might not work as well for certain types of accents or voices. This could become a serious problem as we move towards widespread adoption of such services. Certain consumers might be left behind.**

a. Do you have thoughts on the question of ASR bias?

I agree that voice recognition bias is a serious issue. There is academic research that suggests voice recognition technology can yield results that vary by gender and dialect. This is one of several issues associated with service quality that I believe the FCC should have addressed before authorizing ASR in its June 7, 2018 order. Nonetheless, there is an outstanding rulemaking on performance standards associated with the use of ASR to substitute for traditional Internet Protocol Captioned Telephone Service. Going forward, I want to see the agency acknowledge that with functional equivalency as our mandate under the Americans with Disabilities Act, we need to provide guidance regarding how it can be achieved, especially in light of problems like recognition bias.

b. Do these technologies work better for certain populations than others? If so, what might that mean for relying on this service.

There is academic research that suggests voice recognition technology can yield results that vary by gender and dialect. Going forward, I want to see the agency acknowledge that with functional equivalency as our mandate under the Americans with Disabilities Act, we need to provide guidance regarding how it can be achieved, especially in light of problems like recognition bias.

2. In considering the UST petition, does the Commission have the flexibility to take into account disparate market conditions or is it required to simply approve the petition as filed? Does the Commission have the flexibility to consider the impact of a natural disaster in a local market, such as Hurricane Maria in Puerto Rico, and how the local market conditions were and still are being impacted post-hurricane?

Section 10(a) of the Communications Act sets forth the criteria for forbearance determinations. The FCC needs to find that the provisions at issue are not needed to ensure that service is just and reasonable; that enforcement is not necessary to protect consumers; and that forbearance itself is in the public interest. As part of its public interest analysis, the FCC also must consider whether forbearance will promote competitive market conditions. Although the FCC has taken different approaches to market analysis with past forbearance decisions, I believe the agency's statutory directive is purposefully flexible to account for the conditions that you have identified.

3. Will the Commission take into account the special circumstances of how Hurricane Maria devasted the local telecom infrastructure, as well as the local economy, into its consideration of the UST petition and whether such deregulation should occur at this time in Puerto Rico?

I believe the FCC should consider the unique issues affecting Puerto Rico as part of its policymaking. To this end, I believe it is important to note that the FCC's most recent Broadband Deployment Report acknowledges that the agency "remain[s] uncertain as to the current deployment of broadband services in these areas given the damage to infrastructure in Puerto Rico and the U.S. Virgin Islands from Hurricanes Maria and Irma in 2017."

4. The Telecommunications Act of 1996 did not preempt local regulatory bodies from the Commission's evaluation of whether a market was competitive or not and thus warranted certain regulatory relief.

a. Will you give deference to the input from the local jurisdictions as to whether the local market conditions warrant deregulation at this time, particularly in the case Puerto Rico where the recovery efforts are still ongoing?

Because a grant of forbearance necessarily limits the application of both federal as well as state enforcement, I believe it is important for the FCC to fully consider input from local jurisdictions as part of its analysis.

The Honorable Jessica Rosenworcel, Commissioner, Federal Communications Commission

The Honorable Tony Cárdenas (D-CA)

1. **I recently wrote a letter to the FCC regarding the deployment of mid-band spectrum—specifically the C-band—for 5G services. I believe this spectrum could help accelerate the introduction of next-generation wireless services to communities across the**

country. Accordingly, I believe that any attempt to reallocate mid-band spectrum for 5G use should seek to maximize the amount of mid-band spectrum that is ultimately made available. I also believe that during any reallocation, the important programs that consumers in my district use for local news, weather, and entertainment should be protected.

My understanding is that a public auction involving the C-band spectrum would likely result in both a fair, open and transparent process, as well as substantially more mid-band spectrum being made available for 5G than the privately-managed spectrum sale. While the market is adept at handling certain things, the FCC's oversight of this limited resource will ensure that any reallocation happens in a way that gives access to all Americans.

a. Will the FCC commit to a fair, open and transparent FCC-led process—consistent with Section 309(j) of the Communications Act—for the reallocation of C-band spectrum for next-generation wireless services?

The Chairman has the authority to determine, in the first instance, what process to use to reallocate the C-band. However, I agree that any reallocation of C-band spectrum should be accomplished in a fair, open, and transparent process that fulfills all of our obligations under the Communications Act. I believe the FCC should work closely with Congress on the best mechanism to accomplish this goal.

2. In 2004, 2011, and 2016, the Third Circuit instructed the Commission to perform the relevant analysis necessary to conduct a thorough and informed review of its ownership diversity policies and the impact from changes thereto. Yet still the Commission has failed to study the impact of its rules on ownership by women and people of color, and now in the quadrennial review NPRM proposes possible further relaxation of its rules without such analysis, flagrantly disregarding the Court's explicit mandate.

a. Why has the commission still failed to undertake the required research?

Media ownership matters. What we see and hear says so much about who we are as individuals, as communities, and as a Nation. But we know that today the ownership of media properties does not reflect the full diversity of the country. That is why I believe the FCC's failure to provide an honest assessment of how our rule changes have increased consolidation and decreased the diversity of ownership is a problem. Moreover, the Third Circuit Court of Appeals has repeatedly criticized the FCC for falling short in its efforts to address this issue in its quadrennial review of media ownership rules. To this end, just last week this court heard oral argument in what is the fourth legal challenge before it concerning the FCC's media ownership rules. At issue was the agency's failure to consider how rolling back our media ownership policies would impact women and people of color. This court has repeatedly directed the agency to get better data on media ownership and diversity and I expect in its upcoming decision it will make clear yet again that we still have work to do.

The Honorable Jessica Rosenworcel, Commissioner, Federal Communications Commission

The Honorable Darren Soto (D-FL)

1. Late last year, the FCC initiated a proceeding looking at how to mitigate space debris. While I think it is a positive step to consider how to address this problem, the Commission may not have the technical expertise or the resources necessary to develop or enforce the complicated regulations it is considering proposing. Further, I understand the FCC has requested a reduced budget for these activities in FY20.

a. Do you agree that it is important to ensure that any orbital debris mitigation regime be straightforward and enforceable?

Yes. In the past year the FCC has approved over 13,000 new satellites for launch. There's a lot of good that can come from all this new activity in the atmosphere. But increasing the number of satellites in orbit like this brings new challenges. Chief among them is that the growing amount of debris in orbit could make some regions of space unusable for decades to come. That should concern all of us—because junking up our far altitudes now will constrain our ability to innovate, connect, and advance satellite systems in the future.

That's why last year I called for the FCC to do more than rely on our decade-and-a-half old orbital debris rules for next-generation satellite constellations. To this end, on November 15, 2018, the FCC adopted a rulemaking to consider the need for updated rules. I believe any new rules should be straightforward and enforceable. Moreover, I believe they need to feature three clear policies. First, everything that goes up in space should be trackable. We need to understand where all our satellites are and where debris is with a high degree of precision. This requires the FCC to work with its federal colleagues to improve methods to assess what is truly in orbit. Second, everything we put up in space should be drivable. This means satellites can avoid existing orbital debris that might come their way or de-orbit at the end of mission. Third and finally, what goes up must come down. We need clear policies for how satellites will be taken out of orbit as soon as they have completed their missions in space in order to help prevent collisions in the future.

Comments on this rulemaking were filed on April 5, 2019 and reply comments were filed on May 6, 2019. Accordingly, I believe it is time for the FCC to work with its federal partners and adopt clear and enforceable new rules—sooner rather than later.

b. Please provide me with the number of employees supporting this project in total and the number of employees on this project with undergraduate or graduate degrees in relevant technical fields, specifically: aerospace, aeronautical, and/or astronautical engineering. Given the reduced budget you are requesting for FY20, is the FCC able to hire additional technical experts with degrees in these fields?

The Chairman is uniquely situated to provide these numbers. However, I believe that with the rapidly growing pace of small satellite launch and technology, it would be prudent to increase our budget in order to ensure we have the resources we need. To this end, on April 6,

2019, I testified before the United States House of Representatives Committee on Appropriations, Subcommittee on Financial Services and General Government and specifically noted that the budget request for the FCC from the Administration fell short of what the agency needed, as communications technologies evolve and grow more critical in every aspect of civic and commercial life.

2. What is the FCC currently doing to ensure that minority programmers are being included by providers; especially in Metropolitan Statistical Areas (MSA) with large minority communities that are currently being underserved?

Not enough. On September 29, 2016, the FCC adopted a rulemaking seeking comment on specific efforts to increase diversity and independent programming. It asked about carriage agreements programmers now sign to get on cable and satellite systems. It also sought comment on the operation of certain clauses in those agreements known as unconditional most favored nation provisions and alternative distribution method provisions. In practice, the FCC found—at least several years ago—that these clauses can make it tough for new and diverse programming to get on the channel line-up of cable and satellite systems. The FCC should refresh the record in this proceeding as a first step toward addressing what you note here: the prospect of markets with large minority communities that are currently being underserved.

The Honorable Jessica Rosenworcel, Commissioner, Federal Communications Commission

The Honorable Robert E. Latta (R-OH)

1. My concern is about how we deliver broadband to all Americans, especially unserved and underserved Rural America. One technology will not be the panacea for this challenge, but we will need a combination of solutions. Can you comment on what role you see spectrum playing in rural America and discuss if you think spectrum sharing is a feasible part of that solution?

Our airwaves may be invisible, but they are some of the most important infrastructure we have. With the right policies in place, they can help us close the digital divide and deliver broadband service to all Americans. To do so, it is essential that the FCC think about the potential for deployment in rural areas at the start of every spectrum auction and structure license size and build-out obligations in a manner that increases the incentives for carriers to deploy service to remote communities.

In addition, spectrum sharing can help with service in rural areas by increasing the range of airwaves available and improving the economics of deployment. The FCC's most significant on-going effort involving spectrum sharing involves the 3.5 GHz band. In this band, the FCC took 150 megahertz of spectrum and opened it up to a mix of government, licensed, and unlicensed uses. Then we proposed a spectrum access database to dynamically manage these different kinds of wireless traffic. This multi-tiered approach to spectrum access is unprecedented and creative, combining vertical and horizontal sharing in the same band for the first time. I believe that the FCC should begin the auction of this special mix of airwaves later this year.

I do, however, regret that during the last year the FCC—over my objection—increased the size of the licenses available in the 3.5 GHz band. I worry that this will reduce interest in the auction from non-traditional bidders and smaller providers, decreasing the likelihood that these licenses will be especially useful for deployment in rural communities.

The Honorable Jessica Rosenworcel, Commissioner, Federal Communications Commission

The Honorable Greg Walden (R-OR)

1. Would you support the Chairman's effort to move forward in evaluating appropriate allocation of the 5.9 GHz band at this time? Why or why not?

Yes. I support the Chairman's effort to move forward with a fair assessment of the allocation of the 5.9 GHz band.

Twenty years ago, the FCC set aside 75 megahertz of spectrum in the 5.9 GHz band for dedicated short range communications, or DSRC. DSRC was designed for cars to talk to each other in real time and help reduce accidents. But in the two decades since the FCC allocated this spectrum, the deployment of this technology has been extremely limited. Now, autonomous vehicles have moved beyond DSRC to get around and communicate using a mix of radar, LIDAR, cameras, on-board mapping tools, and cellular networks.

I believe we should support automobile safety efforts. However, our spectrum policies concerning safety need to be current. So it is time to take a fresh look at this band and see if we can update our commitment to safety and also develop more unlicensed opportunities for Wi-Fi in these airwaves. I believe it is possible to do so in a fair and open-minded rulemaking. I sincerely hope that the FCC is able to adopt such a rulemaking without further delay.

The Honorable Jessica Rosenworcel, Commissioner, Federal Communications Commission

The Honorable John Shimkus (R-IL)

1. Under the FCC's oversight, the Universal Service Administrative Company (USA) has worked to establish a "National Verifier" system to combat fraud in the Lifeline program by ensuring all applicants are eligible for Lifeline benefits. It is my understanding USAC is actively transitioning many states from "soft-launch" status, in which participation in the National Verifier system is voluntary, to a mandatory verification system. I want to ensure that we expeditiously continue this transition to a more secure and accurate verification system. Please describe how the FCC, working with USAC, will continue the push for implementation of a robust mandatory National Verifier system.

I share your interest in seeing a timely and successful launch of the National Verifier. To date, the National Verifier has been hard-launched in 22 states, 4 territories and the District of

Columbia. In addition, on June 17, 2019, the FCC's Wireline Competition Bureau announced the soft launch of the National Verifier will take place in an additional 11 states on June 25, 2019. However, the launch has been uneven. In many states the National Verifier does not have access to the full set of databases that determine program eligibility. As a result, the National Verifier, as presently developed, requires additional work to ensure proper program administration and accountability. To remedy this situation, the FCC should work with USAC to honestly assess the present and future capabilities of this system. In addition, the FCC should publish a timeline for updating and enhancing the additional databases it expects to incorporate and detailing any others for which it lacks access.

The Honorable Jessica Rosenworcel, Commissioner, Federal Communications Commission

The Honorable Susan W. Brooks (R-IN)

1. I firmly believe that letting the private sector compete is the best way to ensure the U.S. will be the world leader in 5G technology. Can you address criticisms of that idea and the notion that the U.S. should nationalize a wholesale 5G network to somehow ensure its leadership in this space?

I believe proposals to nationalize a wholesale 5G network diagnose the right problem—the need to lead in 5G technology—but offer the wrong solution. For starters, it is not clear what spectrum exists that would support such a proposal. In addition, it is not clear how the government could quickly construct a full national network when private carriers already have their own 5G network deployment well underway. Finally, I believe the United States led the world in the deployment of 4G networks with policies that promoted competition and private sector investment. I believe we need to recommit to these policies with the deployment of 5G service rather than abandon them in favor of a single, nationalized network.

Attachment—Additional Questions for the Record

Subcommittee on Communications and Technology and
Hearing on
"Accountability and Oversight of the Federal Communications Commission"
December 5, 2019

The Honorable Jessica Rosenworcel, Commissioner, Federal Communications Commission

The Honorable Anna G. Eshoo (D-CA)

1. **The decision to increase minimum service standards was proposed in conjunction with a port freeze. Coupling these items was essential for increasing service, while also reducing waste, fraud, and abuse. Why is the FCC moving forward with just increasing minimum service standards which has caused carriers to cease providing Lifeline services?**

In 2016, the Federal Communications Commission decided to modernize the Lifeline program for the broadband era. As part of this effort, the agency committed to a series of changes that over time would reduce support for traditional telephony and increase the focus of the program on broadband. The agency also set up a 12-month port freeze for Lifeline-supported broadband service in order to "incentivize greater up-front investments from providers" in "broadband-capable devices and services."

However, in the intervening years it has become apparent that those who rely on Lifeline still depend deeply on the program for voice services. In other words, while the market has evolved, it has not moved precisely in the way we imagined it would when these policies were put in place in 2016.

As a result, a coalition of carriers and Lifeline advocates petitioned the FCC to pause the changes to program support that were slated to take place in 2019. I believe they made a compelling case that additional study was warranted before allowing further adjustments to the program's minimum service standards. In fact, I think the agency should have pursued such study in order to better understand current and future needs of Lifeline program recipients. However, in a decision in November 2019, the FCC chose a different course. Instead of pausing for further study, the agency adjusted the minimum service standards for data for Lifeline offerings for the following year.

I am concerned that the agency's action did not do enough to provide this program with the certainty it needs. That's because without pausing for review at this time, the FCC will be back in the same place, wrestling with the same issues, and dealing with another set of scheduled service adjustments to our minimum standards at the end of this year.

2. The FCC found that "the large increase in the minimum standard for mobile broadband usage could unduly disrupt service to existing Lifeline subscribers." Would the FCC suspend the implementation of next year's minimum service standard if a similarly large increase is anticipated again?

Unfortunately, over my dissent, the FCC's November 2019 decision regarding Lifeline minimum service standards did not provide the program with the certainty it needs. As a result, it seems likely that the FCC will have to revisit its Lifeline minimum service standards again later this year. When it does, I hope that the agency will conduct a more thoughtful assessment of the program in a manner that helps ensure its stability.

3. Is the FCC considering opening a new proceeding to revisit the appropriate formula for calculating minimum service standards for Lifeline mobile broadband service?

In the period following the 2016 decision modernizing the Lifeline program, it has become apparent that those who rely on Lifeline still depend deeply on the program for voice services and the formula put in place to update data minimums may have unintended consequences. In other words, while the market has evolved, it has not moved precisely in the way we imagined it would when these policies were established in 2016.

Recognizing that our rules are not working as intended, I did not support the FCC's decision in November 2019 to only adjust minimum service standards for broadband services for a 12-month period. I believe that a better course of action would have been to pause further adjustments of the minimum service standards pending completion of the FCC staff's State of the Lifeline Marketplace Report due on June 30, 2021. This would permit the agency to assess what changes, if any, are necessary, informed by actual data about the marketplace. Though the agency did not choose to proceed this way, it could still examine what measures are needed to bring stability to the Lifeline program, including a thoughtful assessment of the operation of its minimum service standard formula.

4. You've raised network security issues as a major concern of yours. Beyond supply chain issues, which the FCC and our Subcommittee have worked on, what other recommendations can you make relative to securing our nation's wireless networks—for example, addressing SIM swaps, carriers' usage of dated encryption and authentication algorithms, and the threats of cell simulators or IMSI catchers?

The very first sentence of the Communications Act tasks the agency with a duty to "make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service for the purpose of the national defense" and for "promoting safety of life and property." Accordingly, the FCC has a clear mandate to help ensure the safety and resiliency of our nation's communications networks.

To this end, the agency needs to address communications vulnerabilities like SS7. SS7 is a signaling protocol that permits carriers to communicate with one another to deliver calls and text messages between and among their networks. While SS7 offers practical benefits, it is known to have significant cybersecurity problems. It is well understood that criminals and

foreign governments can exploit flaws in SS7 to track mobile users, intercept calls and texts, and even steal sensitive information available on devices.

The FCC is uniquely situated to comprehensively address problems with SS7—and has both the network expertise and statutory authority to do so. To date, the FCC's Communications Security, Reliability, and Interoperability Council recommended that communications service providers implement specific security measures to help prevent exploitation of the SS7 network infrastructure. The FCC's Public Safety and Homeland Security Bureau, in turn, released a Public Notice recommending that communications service providers implement these measures. The Bureau also sought comment on the progress being made to address SS7 vulnerabilities. At this point, The FCC needs to move beyond studies and voluntary recommendations to ensure that the measures identified by CSRIC are implemented in a timely fashion.

In addition, in 2018 press reports revealed that our networks may be vulnerable to surveillance by IMSI catchers, or stingray devices, including in Washington. These surveillance tools can transform cell phones into real-time tracking devices by mimicking legitimate cell towers and some may even have the capability to record the content of calls. Moreover, there is reason to think that use of these technologies may violate statutory prohibitions against causing harmful interference and requiring a license or authorization to transmit. The security of our communications is at stake and the FCC should do more than offer just silence in response to these reports. At a minimum, the agency needs to explain how foreign actors may be transmitting over our airwaves without approval from the FCC.

The problem of SIM card swaps—in which hackers can steal your mobile identity—also needs attention from the FCC. At its most basic, a SIM swap occurs when someone convinces a mobile carrier to switch a phone number over to a SIM card they own. By diverting incoming messages, scammers can easily complete text-based two-factor identification checks that protect a victim's most sensitive accounts. Press reports have documented a number of incidents in which SIM hijackers drained thousands of dollars—and in one case, $23.8 million worth of cryptocurrencies—out of people's accounts. Other countries are taking steps to mitigate this problem, but so far the FCC has remained silent. I believe that it is important that the FCC seek to understand this growing threat, take steps to encourage carriers to discontinue using insecure methods of customer authentication, and explore the authority it has regarding customer proprietary network information to more broadly protect consumers.

Finally, the FCC must recognize that the equipment that connects to our networks is just as consequential for security as the equipment that goes into our networks. That means we also need to focus on the security of the connected things, otherwise known as the Internet of Things. To do so, the agency can begin by taking a fresh look at its existing practices. Right now, every device that emits radiofrequency at some point passes through the FCC. This routine process for equipment authorization takes place behind the scenes. But we could have the FCC use this process to encourage device manufacturers to build security into new products. In addition, we could work with the National Institute of Standards and Technology to do it. That's because just last year, NIST released a set of draft security recommendations for devices in the Internet of Things. The guide specifies the cybersecurity features to include in network-capable devices. Once the NIST process is finished, we could take that work and update the equipment

authorization process at the FCC. In doing so, we could turn the Internet of Things into the Internet of Secure Things.

5. Some are proposing allocating spectrum in the 6 GHz band for licensed use, by relocating incumbents to the 7 GHz band, though that band is currently occupied by government entities, including the Department of Defense. How long has the FCC been working with the federal government on allocation of 7 GHz?

As you note, the FCC currently is reviewing proposals compiled in our ongoing proceeding involving the 6 GHz band, including proposals to relocate incumbents to the 7 GHz band. My office is not aware of any substantive discussions with other federal agencies regarding this proposal. However, such discussions are likely to take place first and foremost with the office of the Chairman.

6. As you have recognized, the need for unlicensed spectrum is as high as ever, and it's growing. Some have raised concerns about harmful interference to microwave services if unlicensed devices would be allowed to operate in the 6 GHz band. Do you have the data necessary to create rules for these two services to coexist?

Wi-Fi is a powerful force in the digital economy. It can provide a jolt to the Internet of Things and foster massive innovation without the challenge of requiring a spectrum license. We need more of it—and the 6 GHz band is the right place to start. The technical studies in the record at the FCC suggest that there could be opportunities to introduce unlicensed services in this band without causing harmful interference to vital, point-to-point microwave communications throughout the country. To this end, the FCC is exploring technology to further mitigate the risk of interference to incumbent services by prior coordination of unlicensed operations. In addition, the FCC has requested comment on a variety of additional mitigation techniques to protect these important services. My office is reviewing the substantial record before us and the technical data that has been collected in conjunction with this proceeding. I remain hopeful that we can make greater use of this valuable spectrum resource without harming existing uses.

7. One promising innovation in wildfire mitigation is the Falling Line Conductor that uses low-latency, private LTE networks to depower a broken line before it hits the ground and becomes a fire hazard. Do you have a view on how such technologies can help mitigate wildfire threats and the need for preemptive electrical shutoffs? When will the FCC complete its 900 MHz proceeding that impacts the ability of utilities to use such technologies?

The timing of the 900 MHz proceeding rests with the Chairman of the FCC. The record that has been compiled in this proceeding highlights a variety of use cases for private LTE networks that could help utilities continue to deliver safe and reliable power to their customers. This includes Falling Line Conductor capability, which would use 900 MHz private LTE broadband to de-energize a power line that has broken, before it can hit the ground and cause fire. Our record demonstrates that some utilities, particularly in California, are interested in this kind of low-band private LTE service and its ability to prevent fires.

In addition to completing the 900 MHz proceeding, the agency must do more to ensure the resiliency of our networks in the face of disaster. After all, public safety is an essential part of the FCC's mandate. But on too many occasions when disaster has struck, our communications have failed. This is happening with disturbing frequency in the aftermath of major weather events, including recent hurricanes and wildfires. In light of this, I believe it is time for the FCC to update its policies regarding network resiliency. First, the agency needs to address the reported deficiencies in its wireless network resiliency policy. Two years ago the Government Accountability Office criticized the FCC for its limited oversight of this framework, but in the interim time the agency has done no more than issue a series of public notices seeking comment on the problems. Second, the agency should update its policies regarding network outage reporting. When our networks go out, so much of modern life grinds to a halt. However, our outage reporting requirements are outdated, because they are generally limited to traditional telephony. In the broadband era, these policies need an update. Third, the FCC must standardize its reports of outages following a major weather event or disaster. Ideally, the agency would release an assessment within several weeks of a major incident. It is simply not acceptable, as was the case following Hurricane Maria, for the agency to wait a year before publishing such a review.

8. On June 11, 2019 at a USTelecom Forum on robocalls, Chairman Pai said "Now that the FCC has given you the legal clarity to block unwanted robocalls more aggressively, it's time for voice service providers to implement call blocking by default as soon as possible." I couldn't agree more. Have carriers responded to this call to action? Have companies raised legal, technical or other objections with these actions requested?

Robocalls are getting worse and consumers are paying the price. For this reason, I was pleased to support, in part, the FCC's decision in June 2019 that allowed carriers to offer opt-out call blocking services to consumers. Since that time, some carriers have offered tools to help consumers block unwanted robocalls while others have indicated that they are evaluating their options. I believe the FCC should continue to monitor how these tools are deployed and how effective they are at screening out robocalls. To this end, in December 2019, the FCC's Consumer and Governmental Affairs Bureau issued a public notice seeking comment on the implementation of call blocking tools.

However, I believe there was one fundamental mistake in the FCC's June 2019 decision. Over my objection, the agency did not require that these call blocking tools be offered for free to consumers. This is not right. Consumers did not create this mess with robocalls so they shouldn't have to pay to fix it. The good news, however, is that the TRACED Act, which was recently signed into law, took a different approach. In this new statute, Congress required the FCC to go back and fix this problem and ensure call blocking is available free to consumers. Under the TRACED Act, the FCC also has a number of new duties relating to robocalls. It is essential that the agency meet all milestones in this law and work to ensure it does so in a consumer-friendly and responsible fashion.

9. At the same USTelecom event in June, Chairman Pai said that "USTelecom has been particularly helpful in making sure that we can quickly trace scam robocalls to their

originating source." How successful has USTelecom's Industry Traceback Group (ITG) been in combatting robocalls?

As you note, there is an effort underway in the industry to identify the network source of robocalls. This work involves tracing just where robocalls are first introduced to our networks, in light of the fact that a single call may travel over multiple carriers. For instance, if there is a call from Augusta, Maine to Anaheim, California, it is unlikely that one carrier is responsible for the call from coast to coast. Instead, after one carrier initiates the call it will likely be handed off to a series of different carriers before it reaches its destination. This is a lot like taking a series of connecting flights on different airlines to travel across the country. Finding where illegal robocalls start in this system requires reverse engineering these handoffs in order to "traceback" where they were first put on the line. This is important because the carrier at the start of the call path may have a financial incentive to allow illegal robocalls to get on the line or may find it convenient to take the money and look the other way. Through this process, I am hopeful we can pinpoint the carriers that are the source of this problem and put them on notice that they are facilitating bogus calls.

The bulk of this effort has taken place through USTelecom, an industry trade organization. I think it's time for the FCC to get more involved. Right now, there is no public process for holding carriers who put this junk on the line accountable. There needs to be one. In addition, I think the agency should explore how carriers that repeatedly engage in this behavior may be subject to either enforcement penalties or even loss of authorization from the FCC.

10. A *Wall Street Journal* article titled "Small Companies Play Big Role in Robocall Scourge, but Remedies Are Elusive" states that "The FCC has asserted limited jurisdiction over VoIP providers, an agency spokesman said." What prevents or limits the FCC from using existing statutory authority to take enforcement actions against VoIP providers?

Robocalls are a serious nuisance and their numbers are growing. At the start of this Administration, consumers received roughly 2 billion robocalls a month. They now average between 5 and 6 billion a month. What we have done to date to stem this tide is clearly not enough. So it's unacceptable for the FCC to throw up its hands and suggest it will not use the full extent of its authority to fix this problem. Moreover, to the extent that there are any gaps in its authority the agency should identify them and seek assistance from Congress to help address how they can be narrowed.

The good news is that in the TRACED Act, which was recently signed into law, the FCC is required to finally take action when it comes to VoIP providers. Specifically, the FCC is required to conduct a study regarding the feasibility of a registry of VoIP providers and consider requiring VoIP providers to retain call records in order to assist with call traceback.

11. The FCC's "Report on Robocalls" (CG Docket No. 17-59; February 2019) states that "Five providers that had been identified as uncooperative in traceback have taken steps to participate going forward." Have these five providers continued cooperating with traceback efforts? Do *any* providers remain that are not being cooperative?

As you suggest, in the FCC's February 2019 Report on Robocalls, the agency acknowledged that after public letters were sent by senior FCC officials to certain companies, those companies then took steps to participate in the industry traceback effort. The lesson here is important: The FCC should be doing more to shine a light on robocalls.

The Honorable Peter Welch (D-VT)

1. **A lack of broadband connectivity can impact all aspects of our lives: keeping children on the wrong side of the homework gap from realizing their full potential, posing barriers to telehealth solutions that can improve care, keeping farmers from capitalizing on advancements in precision agriculture, and limiting economic opportunities for workers and small businesses. However, I have been encouraged by the Commission's support of innovative solutions, specifically TV white space, that can enhance the pace, reach and cost-effectiveness of broadband deployment in rural communities. The adoption of a final order in the TV white space (TVWS) reconsideration proceeding earlier this year marked an important first step, and I encourage the Commission to build on this step by issuing a Further Notice of Proposed Rulemaking (FNPRM) to address remaining regulatory hurdles to greater TVWS deployment as soon as possible. By taking this step, the Commission can update its rules surrounding TVWS, which will increase the potential for rural broadband deployment and, subsequently, the availability and adoption of Internet of Things (IoT) applications throughout rural areas.**

    a. **Will the Commission make the adoption of a TV White Space Further Notice of Proposed Rulemaking a priority to complete as soon as possible and no later than the first quarter in 2020?**

While white spaces innovation began here in the United States, in recent years the use of this technology to bridge digital divides has advanced faster in other nations. At present, there are more than 20 television white spaces projects worldwide that are serving more than 185,000 users. However, in the United States, deployment of this technology has stalled, in part due to outstanding regulatory issues.

Decisions regarding when and how these issues are addressed lie with the Chairman of the FCC. Last year the FCC adopted an order that took steps to improve the accuracy and reliability of white spaces databases. But I believe that much more work needs to be done to address remaining regulatory barriers. To this end, I believe the FCC should resolve outstanding petitions for reconsideration involving white spaces activity. In addition, the agency should explore additional rule changes to facilitate connectivity. I would fully support a further notice of proposed rulemaking to do so, just as you recommend.

The Honorable Tom O'Halleran (D-AZ)

1. **Commissioner Rosenworcel, as rural communities begin gaining more access to modern broadband technology, I believe it is imperative that communities are empowered to understand how to best use broadband to thrive with e-learning, access telemedicine, and compete in our global economy. I also understand schools, libraries, and community centers in rural areas have begun local digital literacy training programs to teach communities how to leverage modern applications through the internet.**

    a. **How can the FCC incentivize the creation of more digital literacy training programs for rural communities?**

Digital literacy is a significant challenge in the United States. While technology may feel ubiquitous in many communities, there are populations across the country that are still outside its everyday reach. To this end, data from the Pew Research Center found that a majority of adults in this country can answer fewer than half the questions correctly on its digital knowledge quiz and many struggle with basic cybersecurity and privacy questions.

It's apparent that we need to do more to extend digital age opportunity to all. In 2017, the FCC created a brand-new organization within the agency: The Office of Economics and Analytics. Since its creation this office has published just two white papers—one involving broadband access in multi-tenant environments and another about the organization of economists in regulatory agencies. I think that the Office of Economics and Analytics should be charged with surveying digital literacy efforts across the country in order to create a national repository for information on digital literacy and developing a set of targeted best practices.

    b. **What role can discount internet offerings from internet service providers to persons already in federal assistance programs (food stamps, housing, etc.) further increase broadband adoption in rural communities? Has the FCC examined adoption rates in light of these programs?**

FCC data show that more than one-third of households nationwide do not subscribe to broadband. In rural and Tribal areas, the adoption challenge is even more profound.

Both private and public efforts are needed to help address this national challenge. To this end, some internet service providers offer discounted offerings for qualifying low-income Americans. These industry efforts would benefit from further promotion and expansion. Meanwhile, the FCC is responsible for the Lifeline program, which provides a monthly discount on service for eligible low-income subscribers. This program is limited to one subsidy per household. There are a variety of ways for an individual to qualify for the program, including having an income 135% or less than the federal poverty guidelines. In addition, individuals can qualify by participating in a variety of federal assistance programs, including the Supplemental Nutrition Assistance Program (SNAP), Medicaid, Supplemental Security Income, Federal Public Housing Assistance, Veterans Pension and Survivors Benefit, as well as certain Tribal programs. Going forward, however, it is essential that the FCC continues to work to improve the National Verifier—the online portal used to qualify applicants for the Lifeline program. At present not all

of these assistance programs are in the verifier system, causing difficulties for applicants. The FCC needs to fix these problems as soon as possible.

c. How can schools and libraries continue to play a critical role in expanding Wi-Fi hotspot lending programs to students to help close the homework gap?

This is a terrific idea. Today, seven in ten teachers assign homework that requires internet access. But data at the FCC suggest that roughly one in three households do not subscribe to broadband service. Where these numbers overlap is the homework gap. The Senate Joint Economic Committee has studied this problem and determined that it affects as many as 12 million students nationwide.

You see them in communities across the country—lingering in the library, hanging out in school parking lots, or sliding into booths at fast food restaurants—going wherever they can to get the online signal they need to complete nightly schoolwork.

We should do better by these students. There are programs today in libraries from Maine to Missouri that loan out wireless hotspots. These are invaluable for anyone in a household without reliable and consistent access to the internet. They are especially critical for students who do not have the broadband at home they need to do their homework. Accordingly, it's time to ask how we can expand such programs and what role Congress and the FCC can play to help make that happen.

Working with Congress, the FCC could establish a national fund to solve the homework gap and do so by using a portion of the funds raised from the future sale of spectrum. In other words, the homework gap is a public problem, so let's use resources from public airwaves to fix it. This could be done, for instance, with the 3.7-4.2 GHz band or with any other airwaves that may be the subject of upcoming legislation. The fund established could help, for instance, support the availability of wireless hotspots in every school library across the country. It could also help make more school buses wi-fi enabled. This would turn ride time into connected time for homework and would be especially valuable in rural areas where so many students spend hours on a bus simply to get to and from school every day. If we did this, we could help ensure that every student has a fair shot at success in the digital age and that no child is left offline.

<u>The Honorable Greg Walden (R-OR)</u>

1. As I stated at the hearing, ending diversion of 9-1-1 fees is a priority for me. According to recent reports submitted to Congress pursuant to the New and Emergency Technologies 9-1-1 Improvement Act of 2008, states and taxing jurisdictions are still diverting 9-1-1 fees for purposes other than 9-1-1. What statutory tools would be useful for the Commission, or other entities, to stop states from diverting 9-1-1 fees?

911 fee diversion is a form of fraud. It needs to stop. To this end and pursuant to the NET 911 Improvement Act, the FCC publishes a report on the state collection and distribution of 911 and enhanced 911 fees and charges each year. This is an important report because it shines a

light on the states and localities that engage in 911 fee diversion. Nonetheless, some fee diversion continues. So it may be time for Congress to revisit this law and identify what other things we can do to prevent diversion going forward.

In the past, I have worked to draw attention to this issue with my colleague Commissioner O'Rielly. Together we have explored some ideas to disincentivize diversion, including prohibiting representatives from states that repeatedly divert 911 fees from participation on FCC advisory committees and prohibiting fee-diverting states and localities from any federal support dedicated for 911 system upgrades in any new infrastructure legislation.

The Honorable Robert E. Latta (R-OH)

1. **As the author of the Precision Agriculture Connectivity Act that was included in last year's Farm Bill, I am interested in the economic benefit of GPS to the agriculture sector. Talking to farmers in my district, I know GPS can improve farm planning, field mapping, soil sampling, tractor guidance, crop scouting, variable rate applications, and yield mapping. All this innovation relies on connectivity, including that provided by GPS. How will the Commission continue to protect GPS services from harmful interference?**

A few months ago, I visited Pape Farm in Dyersville, Iowa and saw firsthand how precision agriculture can improve farm planning, field mapping, soil sampling, tractor guidance, crop scouting, yield mapping, and more. I recognize that Global Positioning Signals are fundamental to all of this activity. Moreover, outside the farm, we count on GPS to navigate our roadways, track our misplaced devices, check in on social media, and support bank transactions, shipping systems, and our national power grid. In addition, our military depends on GPS for everything from search-and-rescue missions to missile strikes.

For all of these reasons, GPS is an important part of our national and economic security. That's why a little over a year ago, the FCC augmented our GPS system by permitting consumers and businesses in the United States to supplement GPS with the European global navigation satellite system, known as Galileo. Going forward I believe the FCC will need to continue to review GPS use to ensure that it remains safe from harmful interference and that it can continue to support economic innovation in agriculture and so much more.

The Honorable Adam Kinzinger (R-IL)

1. **During the hearing, I asked Chairman Pai the following questions:**

    a. **Are there cybersecurity or physical security concerns if information and communications technology companies allow non-cleared or un-vetted personnel access to software development kits or application programing interfaces for 5G networks?**

b. Is there a common standard to use vetted personnel, AI, or machine learning to analyze source code that will be distributed or used in patches for software updates of 5G equipment?

While the Chairman provided thoughtful answers in response, I ask that the Commission follow up with the Committee to offer any supplemental information or ideas regarding the ways in which the Commission, using existing authorities, or Congress, by enacting new legislation, can bolster the physical security and cybersecurity of our 5G networks. Please be as detailed as reasonably possible, and if the Commission feels that these responses are best conveyed to the Committee in a confidential manner in order to protect our national security, please indicate as much to the Committee and we will work with you all to make appropriate arrangements.

5G requires new approaches to security across the board—including physical security. Unlike prior generations of wireless technology, 5G small cells will add a whole new and denser layer of equipment to our world. Networking equipment, storage, computing hardware, and other valuable infrastructure will be located much closer and be more accessible to the public—in cities and housing developments, commercial and industrial locations, and along roads and highways. These facilities also will be accessed routinely by employees, technicians, and contractors, often times from several different companies or subcontractors.

On top of that, 5G networks will move away from centralized, hardware-based architectures to distributed, software-defined networking. While this offers many compelling benefits, it also could create security risks.

Securing widely dispersed and software-based 5G systems is crucial. The Department of Homeland Security's Information and Communications Technology Supply Chain Risk Management Task Force currently is identifying and evaluating threats to ICT supplies, products, and services and producing policy recommendations. Right now, the Task Force is finalizing its work streams for its second year. Its membership and scope make it an ideal place to advance discussions about physical security of 5G networks. In addition, the National Telecommunications and Information Administration has launched a multi-stakeholder process on software component transparency, with the goal of increasing transparency around the use of software components so that when vulnerabilities are detected, there is a way to quickly remedy problems. The FCC should work with these agencies and others to better understand companies' practices in terms of restricting access to software development kits or programming interfaces for 5G networks to vetted personnel; developing common standards for software patches of 5G equipment; and ensuring physical security of 5G infrastructure.

Financial Services and General Government Subcommittee

(Federal Communications Commission Budget Request for FY2021)

Questions for the Record Submitted by Congressman Tom Graves)

Rural Digital Opportunity Fund

Chairman Pai, thank you for your leadership on the Rural Digital Opportunity Fund. This is certainly a needed initiative that will benefit citizens all over the country. Currently, the RDOF framework proposes that project eligibility be based on FCC maps. The State of Georgia has invested in an unprecedented broadband service mapping project to obtain an accurate representation of where residents and businesses need to be connected and where connectivity is lacking. Georgia's new maps meet the future mapping criteria the FCC will use.

Question: Will the FCC allow the use of state produced maps that meet the FCC's future standards in determining eligibility for RDOF?

While I approved the concept behind the FCC's Rural Digital Opportunity Fund, I dissented in part because the agency chose to proceed without first improving its maps. This is a problem. We know we have a serious digital divide in this country. We also know that the FCC's data identifying where broadband is and is not nationwide is riddled with flaws. Under these circumstances, committing the vast majority of the agency's universal service broadband funds for the next decade—$16 billion—before doing anything to improve our maps is not smart. This is especially true when there are so many communities, organizations, carriers, and states that have gathered data that is more granular and accurate than what the FCC is using right now. To this end, I understand that Georgia is developing its own statewide maps regarding the availability of broadband. I think the FCC's failure to consider this data and incorporate these efforts is unfortunate. In fact, I think this needs to be addressed by the agency before it proceeds.

Universal Service Funds

Because of the coronavirus risk, many schools in exposed/infected areas are temporarily closing, and switching to on-line education, where broadband is available. Unfortunately, some seven million students are in regions where there is no broadband at home (according to NTIA). If students cannot obtain Internet access at home during school hours when online education occurs, the problem becomes not just a Homework Gap but an Education Gap.

I understand that some communities have initiated hot spot lending programs that can provide quick, low-cost wireless broadband service to homes, but most communities do not have sufficient funding to implement these programs.

Question: Can the FCC make expedited Universal Service Funds available to communities so that they can set up hot spot lending programs when the schools are closed, similar to the way the FCC made funding available to Puerto Rico in the wake of Hurricane Maria?

Yes. The FCC can use its universal service powers under section 254 of the Telecommunications Act of 1996 to assist students caught in the Homework Gap, who lack the internet access they need to continue with their education during this crisis. The FCC should use this authority to address this nationwide problem without further delay.

<u>Question:</u> In general, what emergency measures can the FCC take to help connect students to broadband at home so they can continue their educations?

More than 50 million students are at home because their schools have shut down in this crisis. To continue with class, millions of them have been told to go online. But millions of students across the country have no internet access at home. This is the Homework Gap. It's the cruelest part of the digital divide. Before this crisis, students struggling with the Homework Gap could go to libraries and fast food restaurants and coffee shops to pick up a free wi-fi signal and do their nightly schoolwork. But with so many of those places closed, kids without broadband are locked out of the virtual classroom. This is not right. The good news is that the FCC has authority under the E-Rate program to provide assistance. This can be done, for instance, by allowing schools to use E-Rate to secure wi-fi hotspots for loan to students without broadband at home or assist with other connectivity options. The FCC has the ability to do these things right now—and it should.

Financial Services and General Government Subcommittee

Federal Communications Commission

Questions for the Record Submitted by Chairman Quigley

CONSUMER PROTECTION

When the FCC reversed the strong net neutrality rules put into place by the Open Internet Order, a key argument was that the Federal Trade Commission (FTC) would still be able to protect broadband customers using its consumer protection and antitrust authorities. To facilitate this, the FCC signed a memorandum of understanding with the FTC to share relevant information.

This subcommittee also oversees the FTC. In researching this issue, my staff and I have confirmed that as of February the FCC has not proactively referred a single consumer complaint to the FTC about broadband service since the net neutrality repeal went into effect. While the FCC has forwarded roughly 4,000 complaints to the FTC, every single one was provided at the request of the FTC.

Given that the FCC continues to oversee billions in annual subsidies for broadband, we find it reasonable that consumers first turn to the FCC when they have concerns about broadband service. What do you consider the FCC's role to be in ensuring that those complaints are not overlooked due to jurisdictional issues?

I agree that the FCC should be the place for consumers to go when they have an issue with communications services, including broadband. That's one of the reasons why the FCC's decision to roll back net neutrality was a mistake. It defies common sense that the agency with responsibility for communications nationwide looks the other way when it comes to the most important communications infrastructure of our time—broadband. After all, people across the country turn to the FCC when they have problems with communications and the agency should investigate and follow up on every complaint. But its abdication of this authority as a result of the net neutrality decision means that somehow consumers are supposed to take up their internet access issues with the FTC, an agency that lacks the communications and engineering expertise required to address their concerns.

The FCC has been developing expertise on broadband issues for decades. Wouldn't consumers would be better protected if the FCC leverages its expertise in proactively analyzing consumer complaints and making affirmative recommendations to the FTC?

Yes.

Do you believe that the FCC's action to date on broadband service fully satisfy the terms of the memorandum of understanding?

When the FCC decided to roll back its net neutrality policies, I said that ceding our authority to the FTC made no sense. The FTC is not the expert agency for communications. It has authority

over unfair and deceptive practices. But to evade FTC review, all any broadband provider will need to do is add new provisions to the fine print in its terms of service. This is hardly satisfying for consumers. They continue to write to the FCC when they have problems with broadband service. So I do not understand how the FCC can say it is fully satisfying the needs of consumers no matter the terms of the memorandum of understanding.

CYBERSECURITY AND NATIONAL SECURITY

The FCC has voted to ban the use of the Universal Service Fund (USF) money to buy equipment from ZTE or Huawei due to national security concerns. The Commission is now collecting information about the scope of a potential "rip and replace" program, which would aid implementation of the Secure and Trusted Communications Networks Act of 2019 (P.L 116–124).

A network is only as secure as its weakest link. While I'm encouraged by the actions taken to address national security risks around USF recipients, the FCC's policy does not address broadband networks that do not receive Federal subsidies. What actions is the FCC taking to address vulnerabilities across other parts of the network?

I share your concern. That is why I requested that the FCC explore our authority over carriers under the Communications Assistance for Law Enforcement Act (CALEA) to consider this more broadly than just through support from the universal service program. Section 105 of CALEA requires every telecommunications carrier to ensure that any interception of communications or access to call-identifying information effected within its switching premises can be activated only pursuant to a lawful authorization and with the affirmative intervention of an officer or employee of the carrier. Furthermore, the FCC is authorized to prescribe such rules as are necessary to implement these requirements. For these reasons, I believe the use of this authority deserves further discussion by the FCC. To this end, I appreciate that my colleagues agreed to my request to ask questions about CALEA in the rulemaking concerning the use of universal service funds for equipment that raises national security concerns.

In addition to these efforts, we need an approach to supply chain security that recognizes that secure networks in the United States will only get us so far because no network stands by itself. Our networks will still connect to insecure equipment abroad. So we need to start researching how we can build networks that can withstand connection to equipment vulnerabilities around the world and help build a more diverse supply chain to do so. One way to do this is to support the development of equipment that virtualizes and diversifies key parts of our networks—an idea known as open radio access networks (ORAN). The FCC should explore policies to support ORAN and develop testbeds that bring together stakeholders to promote more open and interoperable standards. We can even build this effort into our ongoing work to authorize city-wide 5G testbeds in New York and Salt Lake City.

Finally, we also need to identify how to increase security in the growing internet of things. The FCC has unique authority in this regard. That's because every device that emits radiofrequency at some point passes through the agency. If you want proof, take a quick glance at the back of any smartphone or computer or television. You'll see an identification number from the FCC.

It's a stamp of approval. It means the device complies with FCC rules and policy objectives before it is marketed or imported into the United States. The FCC should explore how this routine authorization process can be used to encourage device manufacturers to build security into new products. To do this, we could build on the National Institute of Standards and Technology draft set of security recommendations for devices in the internet of things. It covers everything from device identification to device configuration to data protection to access to interfaces to critical software updates. In other words, it's a great place to start—and with billions of new devices coming our way we should get going now.

You have suggested that there are additional steps the FCC can take to promote cybersecurity, including use of its equipment authorization process to encourage device manufacturers to integrate more security features. Why hasn't the FCC acted on that proposal?

The decision to update our equipment authorization process to encourage device manufacturers to integrate more security features rests with the Chairman of the FCC. However, I would fully support such an effort.

Former Chairman Wheeler attempted to improve security for 5G wireless devices through cybersecurity reporting requirements, but the November 2017 Spectrum Frontiers item rescinded this previously adopted rule. How does that elimination promote 5G security?

I know that with past generations of wireless technology, too often it has been our practice to enjoy their benefits before fully addressing any risk. We often took on cybersecurity problems only after they revealed themselves through usage, including with ongoing problems with SS7 networks and rogue use of cell-site simulators. This approach has real limitations. With more connected things and the advent of 5G service, we need a new, forward-looking approach. Moreover, retrofitting security after the fact can be difficult and expensive.

We need a forward-thinking approach to 5G. Cybersecurity needs to be part of the equation from the start. The good news is that 5G already features many security improvements over earlier generations of wireless technology. In addition, 5G standards are still in early days. Many have yet to be developed.

So despite the decision to eliminate earlier reporting requirements, I believe we can still take meaningful steps to improve the next generation of wireless security. This effort can start with what is known as the Communications, Security, Reliability, and Interoperability Council. The council is a Federal Advisory Committee that provides recommendations to the FCC on high-profile security-related issues. At the start of last year, I called on the FCC to re-charter and reinvigorate this council. I suggested that when it does, it should identify 5G security as its focus. To this end, three things need to be part of its mandate: more study on security technologies to mitigate risk from the internet of things, more study on network function virtualization to mitigate denial of service attacks, and a new study on 5G supply chain risk management that recommends specific mitigation techniques.

I am pleased that the FCC has since re-chartered the CSRIC and designated working groups focused on managing security risks in the transition to 5G. But we can do more. We should update the council's charter to include 5G security. We should designate working groups focused on the internet of things, network function virtualization, and supply chain risk

management. Then the agency needs to take steps to ensure that their work better informs FCC proceedings and cybersecurity policies going forward.

Is the FCC taking any actions to educate the public about wireless security issues?

The FCC can do more to educate the public about cyber hygiene. In fact, across the country we need a serious public dialogue about cyber hygiene because the small choices we make in our day-to-day digital existence can have a big impact on our economic and national security.

The FCC can help with this effort. In our work, we regularly interact with consumers, organizations, and state and local officials. We need to do more outreach that touches on the basics of cyber hygiene—from downloading software upgrades for devices to assessing connection security when using unlicensed airwaves. We should also study our rules and identify ways we can incorporate best practices into our policies and incentivize and encourage their use.

ROBOCALLS

In 2019, Americans received more than 50 billion robocalls. They are the number one consumer complaint at the FCC, and a primary source of concerns by constituents in my district and many others.

The TRACED Act (P.L. 116–105) went into effect in December. It requires the FCC to take numerous actions to help combat robocalls. What progress has the FCC made so far on implementing the TRACED Act?

The FCC has taken a number of actions to date to implement the TRACED Act. These include requiring call authentication in carrier networks, starting a rulemaking to crack down on so-called "one-ring scams," establishing rules for the registration of an entity to conduct and coordinate traceback efforts to find the source of illegal robocalls, and conforming the agency's rules to requirements in the TRACED Act to lengthen the statute of limitations for violations. Going forward, it's imperative that the agency continue to meet all deadlines set by the TRACED Act and do everything in its power to implement the law.

What steps could the FCC take to increase the speed and efficacy of its robocall investigations?

While the FCC has made headlines with a few big fines, our enforcement actions have not brought an end to these unwanted and intrusive calls. On average, it takes the agency 649 days to complete a robocall enforcement action. That's unacceptable. The FCC needs to move much faster. In report language last year, you asked the FCC to consider a plan to develop a division to consolidate the agency's efforts to tackle robocalls. I believe such an effort would be smart because a dedicated team would be able to work with greater speed and efficiency than the system we have in place today. I also believe we could speed our efforts to stop these calls by prioritizing traceback efforts to cut these calls off at the source.

The coronavirus epidemic has led to a serious uptick in robocalls peddling misinformation, selling products of dubious efficacy, or promoting other types of fraudulent activity. What actions has the FCC taken specifically to address these types of robocalls?

We have seen alarming reports of calls from scam artists hawking fraudulent cures and taking advantage of so many people in so many households who are stuck at home. There should be swift and harsh action holding accountable those preying on the vulnerable during this disaster. To that end, acting in concert with other federal partners, the FCC's Enforcement Bureau sent letters to three gateway providers at the beginning of April. Those letters warned the recipients that if they did not stop bringing coronavirus-related scam robocalls originating overseas to the United States the agency would encourage other carriers to begin blocking all traffic from these gateway providers' networks.

BROADBAND FUNDING AND BROADBAND MAPS

As your recent hearings with this subcommittee, and its counterpart on the Senate, have demonstrated, there is significant and ongoing concern about the FCC's proposal to proceed with the Rural Digital Opportunity Fund before new broadband availability maps are ready. The existing maps are highly problematic, broadly overstating the true availability of broadband maps.

Under the RDOF plan, the FCC proposes allocating up to $16 billion to areas that are currently completed unserved and $4 billion on other areas. How did the FCC arrive at that split?

While I understand and support the need to improve connectivity in rural communities, I believe the FCC made a serious mistake with the Rural Digital Opportunity Fund. It decided to move ahead with using the bulk of its funding for the next ten years—$16 billion—before making any effort to improve our data about where broadband is and is not nationwide. This makes no sense. Moreover, there are no adequate explanations for why we need to proceed this way. Doing so is likely to mean communities that our maps mistakenly suggest have service when they do not are consigned to the wrong side of the digital divide for years to come. A small investment in improving our data first would yield a much larger benefit from these funds.

Is $4 billion enough to cover the remaining unserved locations in the U.S.?

The simple truth is that the agency does not know if this figure is appropriate because it has not done the work to accurately map where service is and is not today. In other words, it lacks a sound basis for the $4 billion figure.

Does this plan future-proof broadband access, so we don't have to provide funding to these areas again and again?

While the agency took some steps in its auction design to advantage "future proof" networks, even those networks may require additional support at a later date in order to maintain their function, especially in communities with a limited subscriber base. However, what is troubling about the FCC's effort is that by choosing to proceed without first fixing its maps to understand where service is and is not available, the agency risks spending its resources in a wasteful

manner and bypassing millions of locations that are erroneously marked as served on its current maps.

The FCC's RDOF order penalizes states that make their own investments in broadband to unserved areas. Why did the FCC adopt this policy and do you think that it is a reasonable approach?

I voted against this aspect of the decision because the FCC got it exactly backwards. We should be encouraging states to work with us and not penalizing them for their efforts to bring broadband to communities that are struggling.

C-BAND AUCTION

We are encouraged to see the FCC commit to a public C-band auction. However, as part of its plan, the FCC has proposed providing incumbent satellite providers in this band up to $10 billion in "incentive payments" to transition out of the spectrum faster. We are concerned that the agency is pursuing a problematic auction design that could unnecessarily drain agency resources and divert revenues away from the Treasury.

Has the FCC ever structured an auction like this before? Do you think the FCC currently has the legal authority to provide these incentive payments?

I believe the FCC exceeded its authority under the law when it required auction participants to pay nearly $10 billion to incumbent satellite operators over and above their relocation costs. There is no legal authority or precedent that allows us to do so.

Section 309(j) of the Communications Act sets forth the procedures for this agency to hold a spectrum auction. It requires that all deposits the FCC may require to bid in an auction, as well as all proceeds from the use of an auction, are deposited in the United States Treasury. Consistent with this rule, under the FCC's tried-and-true *Emerging Technologies* framework, the agency may require new entrants to privately negotiate with incumbents and pay their reasonable relocation expenses. This very specific framework has not only been used in the past, it has been blessed by courts that have reviewed our auction proposals.

However, that's not the framework we adopted here no matter how the FCC's decision tries to dress it up and say otherwise. The *Emerging Technologies* framework is a voluntary and market-based approach to spectrum clearing. It offers new licensees the option to pay for faster access and capitalizes on the fact that a new entrant has better information about the value of relocation and an incumbent has better information about the cost. This asymmetry of information creates incentives for parties to engage in strategic bargaining, increasing the likelihood that a fair and efficient agreement can be reached.

With the C-band auction decision the FCC took what must be voluntary in the *Emerging* Technologies framework and made it mandatory. It demanded that C-band auction winners pay nearly $10 billion to incumbent satellite operators over and above their relocation costs. There is no cite to any legal authority or precedent that allows us to do so. Furthermore, this amount is

not the product of any regulatory system or measurement. It is hard to know how this particular value was settled on in this proceeding.

Moreover, note that when Congress previously authorized the FCC to require similar payments in the context of an incentive auction, it required the agency to use a competitive reverse auction to facilitate price discovery and then give forward auction participants the choice to pay it.

Furthermore, this decision is inconsistent with the court decision in *Teledesic LLC v. FCC* finding that any voluntary incentive payment must be proportionate to the cost of providing replacement facilities. There is no attempt here to explain how the acceleration payment is tied at all to facilitating access to the C-band—beyond placating the largest incumbents.

The FCC tries to get around all of this by suggesting it can create a third category of auction-related payments that are not deposits or proceeds. But by doing so, the FCC is reducing revenues that statutorily must go to the Treasury and is undermining congressional power of the purse. Indeed, if you accept the FCC's argument, it is hard to imagine any limitation on the agency's ability to require payments for any purpose that even loosely can be connected to some spectrum-related goal as a condition of auction participation—and that simply cannot be the case. For all of these reasons, I do not believe the agency has authority to provide these C-band payments in excess of relocation costs.

There is little greenfield spectrum left, so future spectrum auctions are likely to also present complex issues involving incumbent users. Do you have any concerns that providing such large incentive payments would create problematic precedents for future spectrum policy?

Yes. I am concerned that this approach would reduce other spectrum-clearing efforts at the FCC to "let's make a deal." I believe the public interest and spectrum policy would be better served by the FCC working with Congress to produce a statutory effort involving the C-band that creates a better pathway forward on the repurposing of our airwaves for new 5G opportunities.

MERGER CONDITIONS

The FCC approved the Sprint and T-Mobile merger subject to several conditions. The new company must meet certain deployment milestones, divest its Boost subsidiary, and not increase prices for three years.

Are these conditions enforceable by the FCC? If not, then by what Federal agencies?

Yes. Merger conditions that are reflected in the agency's decision approving the T-Mobile/Sprint merger are enforceable by the FCC. However, the agency may waive or reconsider those conditions, as it has done in past transactions. Moreover, the decision to start an enforcement action would be made by the Chairman.

Do the monetary penalties New T-Mobile might face for failing to meet these conditions exceed the benefits they received from merging, according to the filings they provided to the Commission? If not, then what incentive does the new company have to follow through on them?

I share your concern that the agency's merger conditions only camouflage the competitive problems with this transaction.

What happens if New T-Mobile raises prices in the next three years? What happens if they raise prices significantly after three years?

The FCC's merger review resulted in overwhelming evidence that the T-Mobile-Sprint merger would lead to higher prices for consumers. In response, T-Mobile promised to "continue T-Mobile and Sprint legacy rate plans for three years after the merger or until better plans that offer a lower price or more data are made available, whichever occurs first. The retained legacy rate plans may be adjusted to pass through cost increases in taxes, fees, and surcharges as well as services from third party partners that are included in the rate plans, as these increased costs are not within the control of New T-Mobile. The legacy plans may also be adjusted to modify or discontinue third party partner benefits based on changes in the terms of the offering initiated by the third party partner, as this is also not within the control of T-Mobile."

I am concerned about this language. It provides the merged company with loopholes to get out of its commitment to not raise prices. It could point to small improvements in network quality to get rid of cheaper rate plans. It could increase your bill through handset or device costs. It could also add fees and surcharges. Finally, T-Mobile can bundle offerings together in creative ways that ultimately mean you pay more for wireless service.

It is also important to note that keeping rates constant is not an especially good deal for consumers when wireless prices have been falling. According to data compiled by the Department of Labor, wireless prices in the United States fell by 28 percent over the last decade as consumers benefitted from intense price competition among the four nationwide carriers. According to data compiled by the FCC, the cost per megabyte of data declined even more dramatically over this time period—by between 72 and 83 percent. All indicators point to this trend continuing absent the merger. That means a price freeze meant to temporarily mask upward pricing pressure caused by industry consolidation isn't an especially good deal for consumers.

Finally, when this promise expires in 36 months, the company will be able to raise rates without regard to the commitments made in this transaction.

The FCC has removed merger conditions after the fact in the past. What is stopping something similar from happening in this case?

I agree that questions remain about the willingness of the FCC to actually enforce these merger conditions. It has removed conditions after transactions in the past and it may do so again in the future.

NET NEUTRALITY REMAND

The United States Court of Appeals for the DC Circuit remanded several issues relating to the Restoring Internet Freedom ruling back to the FCC. In February, the Commission issued a Bureau-level Public Notice and provided the public a limited to comment on the issues raised by the court.

Tens of millions of comments were filed in the original internet freedom proceeding, and this remains an issue of intense interest by the public and Congress. Why was this notice issued at the bureau level, and not by the Commission? How did the FCC determine the length of the comment period?

The Chairman decided to issue the Public Notice at the Bureau level. As a result, I did not have the opportunity to vote on this effort to seek comment on the net neutrality remand.

I am concerned that the decision to proceed this way effectively hides the issue from the American public. This is not right. After all, we should proceed mindful that millions of people wrote the FCC the last time it sought comment on net neutrality. But by having the Bureau issue this notice and making sure the words net neutrality were nowhere to be found in the headline, it made it difficult for the public to figure out that the agency was requesting comment. In fact, the entire notice was written in the kind of legalese that only an FCC lawyer could decipher.

On top of this, the agency has proceeded in a manner oblivious to the realities of the ongoing pandemic. It seems determined to rush this process. The notice originally set filing dates of March 30, 2020 for comments and April 29, 2020 for reply comments. While the Bureau allowed a limited extension of this pleading cycle on March 25, 2020 for a period far less than parties had sought, it later denied a request from municipalities and first responders seeking more time to respond given their work addressing the coronavirus in their communities. Specifically, on April 20, 2020, the Bureau denied a request from the City of Los Angeles, the County of Santa Clara, the Santa Clara County Central Fire Protection District, and the City of New York to further extend the pleading cycle on the net neutrality remand. I was not provided an opportunity to vote on this decision. However, I think that under the circumstances it's shameful that the FCC did not heed their request.

SPECTRUM COORDINATION

The Federal government has several formal and informal mechanisms in place to resolve spectrum coordination issues, including the Interdepartment Radio Advisory Committee and the Policy and Plans Steering Group. These organizations are designed to allow the Department of Commerce to coordinate the executive branch's positions on spectrum assignment issues. Yet over the past several years, agencies seem to have circumvented this process and publicly raised concerns about the FCC's handling of certain spectrum policy issues, including the 24 GHz and the 5.9 GHz band.

Do these events represent a significant difference from the past in the way agencies have communicated their positions about spectrum issues to the Commission?

Recent spectrum proceedings have exposed problems in the interagency review process. When it comes to repurposing our airwaves for new 5G use, disputes between different federal authorities are increasingly becoming public battles. This is unfortunate. It is becoming apparent that the existing Administration lacks a whole-of-government approach to updating our spectrum policies.

How does the Commission incorporate concerns of this nature into its rulemaking process?

As you note, the FCC uses several formal and informal mechanisms to resolve spectrum coordination issues, including the Interdepartment Radio Advisory Committee and the Policy and Plans Steering Group. The FCC's coordination with these bodies and other agencies is directed by the Chairman of the agency.

Does the Commission have recommendations on how to minimize the potential for additional conflicts of this nature?

The Department of Commerce Spectrum Management Advisory Committee currently is examining how the FCC and NTIA can better coordinate when both federal and non-federal users are involved. I look forward to reviewing their findings once they are available.

Financial Services and General Government Subcommittee

Federal Communications Commission

Questions for the Record Submitted by Congresswoman Torres

6 GHz Question

Unlicensed spectrum, which powers technologies like Wi-Fi, is critical to the U.S. economy, perhaps now more than ever before as workers choose to telecommute and limit travel due to coronavirus, and they need to stay connected to their colleagues through their Wi-Fi connection. I've heard that the 6 GHz band would enable multiple new wide-bandwidth Wi-Fi channels that are critical to a thriving economy. Next-generation Wi-Fi requires far more bandwidth than is available today. When will the Commission move forward to enable shared Wi-Fi access to the band?

The FCC adopted rules that make 1,200 megahertz of spectrum in the 6 GHz band available for unlicensed uses, such as Wi-Fi, on April 23, 2020. I supported this decision because making additional unlicensed spectrum available is a critical part of ensuring a thriving economy in the future. Moreover, for an object lesson in how important unlicensed spectrum is look no further than the ongoing pandemic, because we are relying on Wi-Fi like never before. Work, school, healthcare, and so much more have migrated online. If we're lucky we are using Wi-Fi to call, stream, and create at home as part of our broadband service. But others are driving with devices to get online because in this crisis, Parking-Lot Wi-Fi has become a thing as people get in their cars to go find a signal in communities where internet access at home is scarce. It is a stark reminder that when it comes to digital equity, we have work to do, and opening the 6 GHz band for more Wi-Fi is the right place to start.

On behalf of my constituents who are eager to make this transition to 5G, I hope the FCC keeps focus on this timeline. Now another issue that I know you have considered with respect to opening up more spectrum is e impact on public safety services. As a former 911 operator, I am concerned about ensuring that our emergency response operations are not disrupted. Incumbent public utilities and services in this band for critical communications. To name a few, incumbents provide backhaul for police and fire vehicle dispatch, coordination of railroad train movements, control of natural gas and oil pipelines.

Previously, public safety telecommunications groups expressed concern with the research conducted on this issue. Has there been additional research done or commitments from the FCC to ensure incumbent users of this band that provide critical public safety services will not be disturbed?

We must balance these public safety concerns with the need to provide more 6 GHz bandwidth for consumers and general economic benefits.

When it created new opportunities for Wi-Fi in the 6 GHz band, the FCC also took steps to ensure that licensed incumbent services, including public safety users, are protected from harmful interference. First, the FCC's decision authorizes unlicensed standard-power access

points in the U-NII-5 and U-NII-7 bands through the use of an Automated Frequency Control system which will determine the frequencies on which new unlicensed devices can operate without causing harmful interference. Second, the FCC adopted maximum power levels for low-power, indoor access points based on technical filings in the proceeding that demonstrate that interference is not likely to occur with the proposed power levels. Third, the FCC is requiring devices to use a "listen-before talk" medium access scheme as a means of assurance that incumbent operations will not be harmed. Finally, the FCC is establishing a multistakeholder group focused on the 6 GHz band to provide ongoing insight into coexistence issues and to provide a forum for the industry to work cooperatively towards efficient technical solutions where appropriate.

Auction Revenues and NG911/Broadband Funding

Our nation's 911 infrastructure is in desperate need of investment and modernization. A federal study estimated the cost of transitioning to Next Generation 911 at $12 billion. Commissioner Rosenworcel, you previously stated that the funds raised in auction revenue for C-band Spectrum could be used to do "audacious things," such as help implement Next Generation 911 and eliminate the Homework Gap.

Could you share what actions the FCC could have done to meet these goals?

I believe that the FCC's recent C-band decision was wrong on the law. I also believe it was incorrectly decided as a matter of policy. By acting unilaterally, the agency exceeded its authority and also denied the legislative branch the ability to produce a statute that increases access to public airwaves for 5G and puts the funds raised by their auction to use for new public purposes.

We could have, for instance, used this auction as a vehicle for Congress to repeal the provision in the Middle Class Tax Relief and Job Creation Act that requires the FCC to auction off T-band spectrum less than one year from now. This auction will jeopardize the communications of police and fire officials in New York, Philadelphia, Pittsburgh, Washington, Chicago, Dallas, Houston, Los Angeles, San Francisco, Boston, and Miami. We should be looking for every implement in our policy toolkit to help prevent this public safety mess, including support from the revenues associated with this spectrum auction.

Next, we could have used the billions of dollars raised in auction revenue to do other big things. For instance, we could have started a new initiative to help with rural broadband. We also could have used some of the revenues to seed a Homework Gap Trust Fund to help our nation's students stuck in the digital divide by providing Wi-Fi hotspots for loan in every school library.

But because we acted unilaterally, we did not make it possible for Congress to do these things. Moreover, we potentially discounted the value of this auction in the eyes of the Congressional Budget Office. This is regrettable because with legislation this auction would have stood on sturdier ground and the funds associated it with it could have been directed to pressing needs.

Chairman Pai, the FCC's recent decision to auction the C-Band was made over the objections of Commissioners Rosenworcel and Starks who both pointed out that the excess auction revenue would be better spent on priorities like NG911 instead of windfalls for

incumbent satellite operators. If it's too late for the C-Band, do you foresee the FCC holding any other spectrum auctions that could generate funds for NG911 in the near future?

Broadband Gap

There are nearly 3 million students that do not have access to the necessary broadband in both rural and urban communities. In 2014, almost 60,000 Inland Empire households were either unserved or underserved. This makes it more difficult for my disconnected constituents to perform critical tasks like completing job applications or doing their homework.

What tools does the FCC have available to ensure that more households are accessing high speed internet?

As you note, there are too many students across the country—in rural areas and urban areas alike—that are caught in the homework gap because they lack the internet access they need to do their nightly schoolwork. The full extent of the homework gap has been exposed by this pandemic, when so many students have been asked to go to school online. Millions of students are unable to attend class because they do not have reliable and consistent broadband at home.

The FCC has tools to help. The Lifeline program, for instance, helps low-income households afford communications service. With record numbers of people filing for unemployment, the agency should revisit this program and ensure it can be used by those who need it, including parents with school-age children. In addition, the FCC has the power to expand the E-Rate program. E-Rate is our nation's largest education technology program. It provides support for broadband to schools and libraries across the country. The agency needs to explore how during this crisis it can use the authority it has with E-Rate to permit schools to loan out Wi-Fi hotspots or support other connectivity options for students without reliable internet access at home. In fact, I think this crisis compels us to do so.

Commissioner Rosenworcel, how is the FCC addressing the broadband gap in underserved urban communities?

On this score, I believe that the FCC can and should do a better job. For evidence, look at the Broadband Deployment Report released last month. In it, the agency notes that there are many Americans without access to the internet and acknowledges that some reside in urban communities where infrastructure has been deployed. However, the agency fails to really investigate the reasons these households do not subscribe. I think this is a mistake. It needs to understand how price, income, services, and digital literacy may contribute to lack of adoption in some communities. In fact, I think this kind of assessment is a necessary prerequisite to addressing the gap you describe. In short, we need to do this work.

In the past if one household in a census block was recorded as connected to high-speed internet, then the entire census block was labeled as connected. Commissioner Rosenworcel, is the FCC taking the necessary steps to ensure proper mapping and distribution of resources?

Last August, the FCC adopted a new Digital Opportunity Data Collection. This was a long-overdue effort to make fundamental improvements to the data the agency uses to populate our national broadband maps. At the time I observed that key aspects of this effort were in conflict with provisions in the Broadband DATA Act, which was under discussion in Congress. Since that time, the Broadband DATA Act has been signed into law. Unfortunately, the agency now has a situation where some of the policies it adopted are in tension with those Congress has asked us to pursue and the FCC is doing nothing to resolve the differences. While I acknowledge that the agency might be able to move faster with additional resources to implement the Broadband DATA Act, it's unacceptable that the agency has done no work on this new legislation. This is especially troubling with the agency expected to hold an auction to distribute $16 billion in funding for the Rural Digital Opportunity Fund this October. These funds represent the bulk of the $20.4 billion the agency has set aside for supporting broadband connections over the next decade. But rushing these funds out the door without first improving the data and maps that should direct where these funds go is an obvious error. It's why the FCC needs to get to work on the Broadband DATA Act without any further delay.

911 Fee Diversion

Five states have illegally diverted almost $200 million in funds that are supposed to go to implementing Next Generation 911 technology for general purposes. States should not be using these critical public safety resources as a slush fund for general purposes. The cost to public safety is too high.

Commissioner Rosenworcel, can you discuss how these funds are supposed to help improve the public safety infrastructure?

The first telephone number I taught my children was 911. It is a number that every one of us knows by heart but every one of us hopes that we will never use. As the old saying goes, you may only call 911 once in your life, but it will be the most important call you ever make.

The fees that consumers are charged on their phone bills for 911 are supposed to go to this essential infrastructure for our day-to-day safety. Meanwhile, the cost to upgrade these facilities to next generation technology is substantial. In fact, the National Highway Traffic Safety Administration and the National Telecommunications and Information Administration have estimated the cost of next generation 911 deployment to be between $9.5 and $12.7 billion. For those in an emergency, next generation 911 will allow them to send real-time video or pictures that could aid in the response. Fully realizing next-generation 911 will likely require funding help from Washington, but in the meantime, diversion of these 911 critical fees is not helpful and not right.

What tools does the FCC have to enforce the proper use of funds?

In the NET 911 Improvement Act, Congress charged the FCC with publishing an annual report on state collection and distribution of 911 and enhanced 911 fees. This allows us to shine a light on those states that have taken funds from 911 fees for other purposes. Going forward, the agency should work with Congress to limit additional funding for 911 improvements to any state improperly diverting funds from consumer bills.

What steps could Congress take to equip the FCC with the necessary tools for enforcement?

In the past, I have worked to draw attention to 911 fee diversion with my colleague Commissioner O'Rielly. Together we have explored some ideas to disincentivize diversion. These include publicizing states that repeatedly divert funds and prohibiting representatives from those states from participating on FCC advisory committees. However, the single most important tool would involve working with Congress to ensure that states that divert funds would risk losing access to further federal support for 911 system upgrades in any new infrastructure legislation.

911 Vertical Location Detection

I was pleased to see that the FCC ordered wireless providers to share 'vertical location' data of 80% of emergency calls with 911 responders. This is critical to ensuring a safe and timely response during a crisis.

Commissioner Rosenworcel, in your partially dissenting opinion, you stated that these regulations do not go far enough regarding reporting in rural communities and data formatting.

Will there be challenges for dispatch centers to process this data?

Yes. In its 911 vertical location decision the FCC required carriers to transmit data in height above ellipsoid format. This is a string of numbers providing measurement from the center of the earth's mass rather than a commonly understood measure like a floor number. Moreover, no effort was made to set up a system translating height above ellipsoid information into useful data for public safety. So when calls come tumbling in to 911 in a crisis, the operator on the other end of the line will be required to figure out what to do with this data that is not by itself actionable information. It will require substantial work to come up with a system to make this data useful for reworked 911. Unfortunately, the FCC did not provide a detailed plan to do so. It needs to address this situation.

Commissioner Rosenworcel, can you elaborate on what steps should be taken to enhance these public safety measures and help 911 call centers?

I believe that the FCC would have been well-served to heed the advice of 911 operators in making changes to its vertical location requirements. First, the FCC should have required actionable information that public safety can put to use in emergency situations. To this end, I would have preferred that the FCC adopted standards that provided floor-level accuracy. So work needs to be done to ensure that height above ellipsoid data is useful for 911 operators and approximates something like floor-level data that can be used in an emergency. In addition, right now the FCC only requires vertical location information for 911 calls in the top 25 metropolitan areas in 2021 and the largest 50 metropolitan areas in 2023. I think we need a nationwide approach because it would better serve the public and our first responders.

Attachment—Additional Questions for the Record

Subcommittee on Communications and Technology
Hearing on
"Accountability and Oversight of the Federal Communications Commission"
May 15, 2019

The Honorable Geoffrey Starks, Commissioner, Federal Communications Commission

The Honorable Anna G. Eshoo (D-CA)

1. **During the worst fire in California's history, Verizon throttled the data speeds of Santa Clara County firefighters, hindering their ability to communicate.**

    a. **If the 2015 Open Internet Order wasn't repealed, could this practice have been considered a violation of the ban on "unjust and unreasonable" business practices?**

Response: The 2015 Open Internet Order adopted rules that prohibited throttling of mobile internet traffic. That order did not make blanket findings about mobile service plans that offer a certain amount of data at a higher speed and then offer additional data at speeds that are typically significantly lower. Instead, the order determined that the Commission would address concerns related to these types of plans under the "no-unreasonable interference/disadvantage" rules adopted in the order on a case-by-case basis. The Commission could also review the data plans used by the Santa Clara County firefighters under the "transparency" rules adopted in the order to determine if the "data caps" associated with the plans, and the consequences of exceeding those caps, were adequately disclosed. Any failure to meet the requirements of the "no-unreasonable interference/disadvantage" or the "transparency" rules adopted in the 2015 order would have resulted in violations of the order's ban on unjust and unreasonable business practices.

    b. **Has the FCC taken any actions to avoid a repeat of this issue in California and other parts of the country by Verizon or other ISPs?**

Response: The FCC repealed the 2015 Open Internet Order that contained the "no-unreasonable interference/disadvantage" and the "transparency" requirements. To my knowledge it has not taken any action to replace them and has not taken any other actions to avoid a repeat of this issue in California and other parts of the country by Verizon or by other ISPs.

2. **Under the 2015 Open Internet Order, the FCC could investigate possible violations of bright-line prohibitions of net neutrality and other "unjust and unreasonable practices."**

    a. **Since the 2017 Restoring Internet Freedom Order, has the FCC been investigating whether ISPs are engaging in blocking, throttling, or paid prioritization practices, both as disclosed by ISPs and undisclosed practices?**

Response: The Chairman of the FCC directs the work of the FCC's Enforcement Bureau. Consequently, I do not have full visibility into the Bureau's investigative work. However, I am not aware of any Commission order or actions issued since 2017 related to investigations of whether ISPs are engaging in disclosed or undisclosed blocking, throttling, or paid prioritization practices.

    b. **If not, would the FCC even know if "Over the past year, the Internet has remained free and open," as Chairman Pai stated on January 2, 2019?**

Response: Unlike the rules put in place by the 2015 Open Internet Order, under the 2017 Restoring Internet Freedom order, ISPs are permitted to block or throttle lawful internet traffic and to engage in paid prioritization. They may do so if they disclose the terms of their intended blocking, throttling, and paid prioritization. Under the 2017 order, ISPs are permitted to disclose their blocking, throttling, and paid prioritization practices either on a publicly available, easily accessible website or by transmitting them to the Commission who, in turn, will make them available on a publicly available, easily accessible website.

In order for the Commission to ensure that no ISP is violating disclosed terms, it would have to constantly monitor ISP websites to see if ISPs have made any new disclosures or changed any existing disclosures. While the Chairman of the FCC directs the work of the Commission's Enforcement Bureau, I am not aware of efforts to engage in the monitoring that would be necessary to ensure ISP compliance with disclosed terms of intended blocking, throttling, or paid prioritization.

3. **The National Verifier has launched in 16 states where it lacks access to any databases for state-administered programs, such as the Supplemental Nutrition Assistance Program and Medicaid. Should an individual be informed that the National Verifier was not able to confirm their eligibility, they could reasonably consider this a denial from Lifeline, even though they may be eligible.**

    a. **Given these issues, what specifically is the FCC or USAC doing to ensure the National Verifier connects with state databases in the states where it has launched or where it is planning to launch, and what is the timeline to do so?**

Response: I am very concerned about the Lifeline National Verifier launching in a state before it is electronically connected to state-administered eligibility databases. My concerns stem from

the high rates at which applicants fail to be verified when manual verification processes are used. However, the Chairman of the FCC directs the work of the bureaus in all areas, including on the Lifeline program's National Verifier process. Accordingly, I do not have full visibility into work that the FCC's bureaus are doing to ensure that the National Verifier is connected to state databases in states where it has launched.

b. Given the above issues regarding the rollout of National Verifier, why is the FCC pushing forward to launch in more states rather than focusing on improving connections to federal and state databases in states where National Verifier is currently deployed?

Response: Please see response 3(a). I remain very concerned about the Lifeline National Verifier operating in a state without being electronically connected to state-administered eligibility databases. My concerns stem from the high rates at which applicants fail to be verified when manual verification processes are used. I do not have visibility into the FCC Chairman's reasoning for pushing forward to launch the Lifeline National Verifier in more states rather than focusing on improving connections to federal and state databases in states where the National Verifier is currently deployed.

4. As the FCC considers USTelecom's petition for forbearance from key provisions of the Telecommunications Act of 1996, what has the FCC done to consider the impact of granting this petition on (i) small and medium-sized ISP's building out the fiber networks needed for upgrading our country's wireless infrastructure to 5G and for closing the digital divide; and (ii) federal, state, local, and tribal government agencies, particularly those that will continue to rely on TDM-based telephone services through the continued availability of resale requirements?

Response: I know from reviewing the public record in the proceeding where the FCC is considering USTelecom's forbearance petition that considerable information and comment has been filed about small- and medium-sized ISPs and their continued ability to build fiber networks if the petition is granted. And, I have reviewed record submissions by federal, state, local, and Tribal government agencies regarding reliance on TDM-based telephone services. Also, advocates representing these stakeholder groups have held meetings with the Chairman's office staff. However, the Chairman directs the work of the Commission's bureaus. Accordingly, I do not have full visibility into what the bureaus have done to consider the impact of granting USTelecom's petition on small- and medium-sized ISPs building out the fiber networks needed for upgrading our country's wireless infrastructure to 5G and for closing the digital divide; or on federal, state, local, and tribal government agencies that will continue to rely on TDM-based telephone services through the continued availability of resale requirement.

I'll note that a draft order proposing to address portions of USTelecom's forbearance petition that was recently made public would grant forbearance for approximately 11,000 locations where a competitive provider has fiber optic cable located within one half of a mile, thereby removing

competitor's regulatory right to access communications infrastructure. The draft order did not address USTelecom's requests related to resale.

5. **Should the FCC further eliminate media ownership rules as it is considering, Americans may experience a sharp reduction in the breadth and diversity of voices available in any local media market. One entity could control all broadcast TV stations, local newspapers, and radio stations. This is a direct rebuke to a fundamental value that underpins our democracy. Please share whether you are considering such outcomes and to what degree you have concerns about the consolidation of media ownership.**

    a. **Has the FCC's newly created Office of Economic Analysis provided input on the impact of eliminating media ownership rules on consumer prices in the video marketplace?**

Response: I will approach the current Quadrennial Review of our media ownership rules with the Commission's public interest standard in mind – with an eye towards promoting competition, localism, and diversity. Those will be my touchstones. I agree that promoting a diversity of voices in public discourse is fundamental to our democracy and, in particular, I feel strongly that the Commission must do more to ensure that ownership of and employment at our media outlets is reflective of the rich diversity of our population. I will closely review the record that we are currently developing.

The Chairman of the FCC directs the work of the Commission's bureaus and offices and I do not have full visibility into the work of the Office of Economics and Analytics. Accordingly, I am not personally aware of any analysis from OEA on the impact of eliminating media ownership rules on consumer prices in the video marketplace.

6. **The FCC is considering a proposal to alter what may be considered toward the statutory maximum of five percent franchise fees (MB Docket No. 05-311). This would negatively impact the access of communities to public, educational, and governmental (PEG) programming. As I stated in my February 22, 2019 letter to the FCC, Congress clearly intended for communities to have access to PEG. The legislative history of the 1984 Cable Act explicitly states that franchise fees are only made up of monetary payments and do not include PEG contributions (H.R. Rep. No. 98-934 (1984)). Congress made its intent on this matter explicit and clear.**

    a. **Under what statutory authority is the FCC considering this proposal which would have the effect of including PEG contributions in franchise fees?**

Response: Since I've been a Commissioner, I've had the opportunity to hear from PEG operators from across the country about the valuable service that they offer in so many communities. They are often the only outlets covering local government meetings. These outlets introduce transparency to local government and increase civic engagement, which makes

the government more responsive and helps prevent waste or corruption. Sometimes, they are called upon to inform the communities during emergencies or natural disasters. And, above all, they are defined by localism, and uplift voices that aren't heard anywhere else. Cable rules enforced by the FCC or local franchising authorities have created a platform for small, local voices to serve local communities.

As you are aware, a Notice of Proposed Rulemaking on this topic was released in September 2018. This NPRM predated my term as a Commissioner. Upon review of the item, the Commission has proposed to interpret various provisions of Title VI of the Communications Act, as amended by the Cable Communications Policy Act of 1984 and the Cable Television Consumer Protection and Competition Act of 1992, as the statutory authority needed to change the way franchise fees are calculated. As you note, this accounting of franchise fees is used to determine whether a local franchising authority has exceeded the statutory cap on such fees.

Attachment—Additional Questions for the Record

The Honorable Geoffrey Starks, Commissioner, Federal Communications Commission

The Honorable Yvette D. Clarke (D-NY)

1. **It is wonderful to see how technology has broken down barriers for people with disabilities, but I am concerned this same technology can introduce new challenges for consumers. As the FCC considers moving to fully Automated Speech Recognition or ASR, I am concerned that fully automated ASR might not work as well for certain types of accents or voices. This could become a serious problem as we move towards widespread adoption of such services. Certain consumers might be left behind.**

    a. **Do you have thoughts on this issue?**

Response: I believe we must ensure that all Americans have access to our communications networks, and that includes Americans with hearing loss. Congress recognized as much when it passed the ADA and required the FCC to ensure everyone receives the full benefits of our phone network. In considering issues like this, we need to ensure that technology is seeking to close gaps and level the playing field, and not leaving folks behind. For many, automated speech recognition is life changing. It is cost-effective, easy to use, and lets folks talk on the phone in their own voice. But we must ensure that the quality of service is comparable to a live human being. We need to follow the science, and make our decisions based on solid studies and good data. We need to ensure that these services work for everybody before deploying them widely.

    b. **What are the risks of technologies that don't recognize certain accents or patterns of speech?**

Response: Unfortunately, often and for various reasons, technologies using algorithms tend to perform worse when it comes to vulnerable communities, such as people of color or those with speech-related challenges. We've seen time and again that advances in technology that move towards biometric data, like facial or voice recognition, may not fully account for folks that aren't captured by assumptions made in the algorithm. The consequences range from deploying services that are simply not useful to those who need them to advancing services that can actively harm users.

    c. **Do you think we need more study on this issue?**

Response: We need to make sure that technology is closing gaps and leveling the playing field, and not leaving folks behind. In this instance, and other similar instances, we certainly need to study these issues before flawed or faulty technology is deployed.

2. **In considering the UST petition, does the Commission have the flexibility to take into account disparate market conditions or is it required to simply approve the petition as filed? Does the Commission have the flexibility to consider the impact of a natural disaster in a local market, such as Hurricane Maria in Puerto Rico, and how the local market conditions were and still are being impacted post-hurricane?**

Response: The Commission has the flexibility to take disparate market conditions into account. The Commission has, on many occasions, considered specific market conditions to determine whether to grant a request for forbearance in a certain area or not.

3. **Will the Commission take into account the special circumstances of how Hurricane Maria devasted the local telecom infrastructure, as well as the local economy, into its consideration of the UST petition and whether such deregulation should occur at this time in Puerto Rico?**

Response: The Chairman of the FCC directs the work of bureau staff and determines what policy decision to propose in draft orders circulated to Commissioners for our consideration. However, I believe that the Commission should take into account the special circumstances of how Hurricane Maria devastated the local telecom infrastructure, as well as the local economy, as it considers the USTelecom petition.

4. **The Telecommunications Act of 1996 did not preempt local regulatory bodies from the Commission's evaluation of whether a market was competitive or not and thus warranted certain regulatory relief.**

    a. **Will you give deference to the input from the local jurisdictions as to whether the local market conditions warrant deregulation at this time, particularly in the case Puerto Rico where the recovery efforts are still ongoing?**

Response: The Chairman of the FCC directs the work of bureau staff and determines what policy decision to propose in draft orders circulated to Commissioners for our consideration. However, I believe that the Commission should give serious consideration to the expertise offered by local jurisdictions as to whether the local market conditions warrant deregulation in Puerto Rico as it determines whether the telecommunications markets in Puerto Rico meet the statutory forbearance test.

Attachment—Additional Questions for the Record

The Honorable Geoffrey Starks, Commissioner, Federal Communications Commission

The Honorable Tony Cárdenas (D-CA)

1. **In 2004, 2011, and 2016, the Third Circuit instructed the Commission to perform the relevant analysis necessary to conduct a thorough and informed review of its ownership diversity policies and the impact from changes thereto. Yet still the Commission has failed to study the impact of its rules on ownership by women and people of color, and now in the quadrennial review NPRM proposes possible further relaxation of its rules without such analysis, flagrantly disregarding the Court's explicit mandate.**

    a. **Why has the commission still failed to undertake the required research?**

Response: I am keenly aware of the fact that, over the course of the past 15 years, the Commission has routinely been reprimanded by the Third Circuit for not collecting the data and performing the analysis required to fully consider the impact of its deregulatory rule changes on ownership diversity. Earlier this month, the Commission was before the Third Circuit yet again to defend actions taken to loosen ownership restrictions. At oral argument, one judge questioned why the Commission believes that collecting data is so difficult and another exclaimed: "If we were to affirm, I can just see the blurb: '3rd Circuit flunks Stats 101.'" It would be my preference that we get it right this time but, as there are no significant research efforts underway that I am aware of, we have a very long way to go. I think we need to do much more.

2. **It sounds to me like everyone is aligned on the need to improve the Commission's broadband data collection and mapping methods. Form 477 asks ISPs if they "could" provide coverage in addition to asking if they actually do.**

    a. **What is the value behind asking what areas "could" be served within the normal course of business?**

Response: I do not see the value in asking ISPs to report what areas they "could" serve. To me, this is the wrong question and is an example of a policy that the FCC needs to change in order to gather data needed to produce accurate maps of where broadband is and is not available in the U.S. Allowing ISPs to report areas where they "could" serve results in data that contains an indistinguishable jumble of areas where service is actually and hypothetically available. This mixture impacts the reliability of any map purporting to show where broadband service is actually available.

Attachment—Additional Questions for the Record

The Honorable Geoffrey Starks, Commissioner, Federal Communications Commission

The Honorable Darren Soto (D-FL)

1. **Late last year, the FCC initiated a proceeding looking at how to mitigate space debris. While I think it is a positive step to consider how to address this problem, the Commission may not have the technical expertise or the resources necessary to develop or enforce the complicated regulations it is considering proposing. Further, I understand the FCC has requested a reduced budget for these activities in FY20.**

    a. **Do you agree that it is important to ensure that any orbital debris mitigation regime be straightforward and enforceable?**

Response: Yes. As an enforcement official at both the Justice Department and the FCC, I have seen firsthand that both stakeholders and enforcement officials must have a clear understanding of our rules before we can consider enforcement, regardless of the subject area.

    b. **Please provide me with the number of employees supporting this project in total and the number of employees on this project with undergraduate or graduate degrees in relevant technical fields, specifically: aerospace, aeronautical, and/or astronautical engineering. Given the reduced budget you are requesting for FY20, is the FCC able to hire additional technical experts with degrees in these fields?**

Response: Although the Chairman is responsible for the FCC's budget, as well as setting priorities for hiring, I believe that the agency must have sufficient qualified personnel to perform its statutory duties.

2. **What is the FCC currently doing to ensure that minority programmers are being included by providers; especially in Metropolitan Statistical Areas (MSA) with large minority communities that are currently being underserved?**

Response: I have already met with a number of diverse programmers during my time on the Commission, and I understand the difficulty they sometimes have with securing carriage of their channels on cable or satellite systems and the impact this may have on underserved audiences. I haven't yet been asked to consider an item addressing this issue, but look forward to working with stakeholders to ensure that there is robust competition, diversity, and innovation in the video marketplace.

Attachment—Additional Questions for the Record

The Honorable Geoffrey Starks, Commissioner, Federal Communications Commission

The Honorable Robert E. Latta (R-OH)

1. **My concern is about how we deliver broadband to all Americans, especially unserved and underserved Rural America. One technology will not be the panacea for this challenge, but we will need a combination of solutions. Can you comment on what role you see spectrum playing in rural America and discuss if you think spectrum sharing is a feasible part of that solution?**

Response: The FCC needs to use every tool in its toolkit to bring broadband to rural America, and spectrum sharing is part of the solution. Unlicensed spectrum could be particularly helpful towards addressing rural America's broadband needs but making that spectrum available without causing harmful interference to incumbent users presents a significant challenge. The Commission's work with the Department of Defense in the 3.5 GHz band, however, demonstrates that sophisticated spectrum sharing approaches are workable even when the most critical communications are at stake. I'm particularly interested in DoD's experiments using artificial intelligence tools to manage spectrum efficiently. Spectrum is a finite resource – we need to explore creative ways to use it while protecting incumbent users.

Attachment—Additional Questions for the Record

The Honorable Geoffrey Starks, Commissioner, Federal Communications Commission

The Honorable Greg Walden (R-OR)

1. **Would you support the Chairman's effort to move forward in evaluating appropriate allocation of the 5.9 GHz band at this time? Why or why not?**

Response: I fully support any initiative to maximize the efficient use of the 5.9 GHz band. Twenty years ago, the 5.9 GHz band was allocated for Direct Short-Range Communications between vehicles and infrastructure. That spectrum remains stuck in limbo. I agree that we need to take a fresh look at the band and make a timely decision. I understand that the Department of Transportation is testing the shared use of the band. I look forward to seeing the results so we can resolve any remaining issues in coordination with DOT and we can move forward as quickly as practicable. Whatever solution we ultimately reach needs to balance our need for unlicensed spectrum with our need for next-generation auto safety.

Attachment—Additional Questions for the Record

The Honorable Geoffrey Starks, Commissioner, Federal Communications Commission

The Honorable John Shimkus (R-IL)

1. **Under the FCC's oversight, the Universal Service Administrative Company (USA) has worked to establish a "National Verifier" system to combat fraud in the Lifeline program by ensuring all applicants are eligible for Lifeline benefits. It is my understanding USAC is actively transitioning many states from "soft-launch" status, in which participation in the National Verifier system is voluntary, to a mandatory verification system. I want to ensure that we expeditiously continue this transition to a more secure and accurate verification system. Please describe how the FCC, working with USAC, will continue the push for implementation of a robust mandatory National Verifier system.**

Response: I am very concerned about the Lifeline National Verifier hard launching, or becoming mandatory, in a state before the National Verifier establishes electronic connections to databases used to determine Lifeline eligibility in that state. My concerns stem from the high rates at which applicants fail to be verified when manual verification processes are used, as compared to much lower rates of failure in states with electronic connections between the National Verifier and state databases. However, the Chairman of the FCC directs the work of the bureaus in all areas, including on the Lifeline National Verifier process. Accordingly, I do not have full visibility into whether or how the FCC will work toward implementation of a robust mandatory national verifier system.

Attachment—Additional Questions for the Record

The Honorable Geoffrey Starks, Commissioner, Federal Communications Commission

The Honorable Susan W. Brooks (R-IN)

1. **I firmly believe that letting the private sector compete is the best way to ensure the U.S. will be the world leader in 5G technology. Can you address criticisms of that idea and the notion that the U.S. should nationalize a wholesale 5G network to somehow ensure its leadership in this space?**

Response: While I believe that the public sector can play an important role in ensuring that the benefits of broadband and 5G service reach every American, I do not believe that we need a nationalized wholesale 5G network to achieve this goal. In my view, rather than debating such abstractions, we should focus on identifying solutions that will allow the technological benefits of next-generation networks to reach everyone, everywhere in this country.

Senator Edward J. Markey

IP-CTS and Automated Speech Recognition

Automated speech recognition (ASR) has great promise for Internet Protocol Captioned Telephone Service (IP-CTS). However, I understand that current ASR engines vary in quality and accuracy, and I am concerned that nascent technologies might be certified for IP-CTS use without adequate testing. I believe that we need to be careful about implementing this service before it is fully ready.

Do you agree that we need to ensure ASR-only providers can handle 911 and related public safety calls before such technology is FCC approved? In your view, has the FCC done enough adequate testing of all types of ASR engines?

Yes. I agree that we need to ensure that all IP-CTS providers, to include potential automatic speech recognition (ASR) providers, can handle 911 and related public safety calls. A call to 911 is often the most important call of a person's life, and being able to quickly and accurately convey and receive information during an emergency call is critical. It is important that the Commission have a full and complete understanding of the quality and performance of services offered by ASR-only providers, and particularly how they compare to human Communication Assistants, prior to certification.

As I've previously noted, we need to ensure that technology is seeking to close gaps and level the playing field, and not leaving folks behind. For many, ASR is life changing. It is cost-effective, easy to use, and lets folks talk on the phone in their own voice. But we must ensure that the quality of service is comparable to a live human being. We need to follow the science, and make our decisions based on solid studies and good data. We need to ensure that these services work for everybody before deploying them widely.

Protecting the C-Band for Public Radio

The Public Radio Satellite System relies on C-Band frequencies to distribute news, programming, and public safety information to nearly 1,300 interconnected local public radio stations and millions of Americans across the country.

Can you assure me that any plans to transition C-Band spectrum for new wirelesses services will not impair the vital role that public radio plays in our news, educational programming, and emergency services?

Public radio is one of our most valuable news sources, and the Public Radio Satellite System provides critical distribution services for more than 1,200 public radio stations. While the Commission should make available as much mid-band spectrum as possible for wireless use, any plan for doing so in the C-Band must protect incumbent users like public broadcasters.

Senator Udall Questions for the Record
Senate Commerce
Oversight of the Federal Communications Commission
June 12, 2019

Question 1: Has the FCC has done enough to push companies into building resilient networks or even publishing best practices to help prevent future outages?

No. The FCC "urges" and "encourages" carriers to follow best practices for network resiliency, but it has fallen short of requiring that companies act. Accordingly, carriers are not subject to enforcement measure or penalties for not taking steps, even basic, well known and accepted steps, to ensure that networks stay operational or are able to be restored quickly following. Furthermore, these limited FCC actions are often reactive, coming in the wake of a storm-related or other outages, rather than proactive efforts designed to prevent outages from occurring in the first place.

The FCC's report released this spring on its actions related to Hurricane Michael finds that carriers fell short of their own commitments when Hurricane Michael slammed into the Florida Panhandle last year, and we saw significant communications challenges in Puerto Rico after Hurricanes Irma and Maria made landfall. This report confirms that voluntary standards aren't sufficient to ensure that carriers invest in preparing their networks to be resilient in the face of hurricanes, which, while devasting, are neither unprecedented nor unpredictable.

And, just this month, the FCC released a report on the massive nationwide 911 outage that took place at the end or 2018. Rather than taking specific actions, this report noted that the FCC would once again remind carriers of industry best practices and their importance.

The FCC has a duty, codified in the Communications Act, to ensure that networks are available for purposes of promoting safety of life and property and for national defense. These are statutory obligations – they can't be met by encouraging carriers to follow voluntary standards.

Question 2: Tribal communities continue to lag behind the rest of the country in the deployment of broadband. The GAO found that inaccuracies in FCC broadband data have led to underestimates of the magnitude of the digital divide on tribal lands. So we may not even have a clear picture as to how wide that gap really is given the current data collection regime. What changes is the FCC considering as part of its efforts to modernize FCC form 477 in order to specifically address the under-reporting in Tribal communities? What are some ways that the FCC can look outside the beltway to engage on this issue?

I visited several tribal communities in New Mexico in August 2019 and had the opportunity to see, first hand, the connectivity challenges that these communities face. The FCC recently adopted an order and related rulemaking notice starting the process of considering changes to its form 477 data collection. The rulemaking notice asked questions about incorporating information from Tribal lands in the data collection and about including Tribal input in a challenge process related to the data collection but did

not propose specific ways that the FCC could take action to address under-reporting in Tribal communities. I dissented from portions of this order because it leaves in place some of the most glaring problems with this data collection at a time when the FCC is proposing to continue using Form 477 data as the basis for Universal Service policymaking.

I believe that the FCC needs to step up its efforts to ensure that all of its data, including data about Tribal communities, is accurate in order to make effective, data-driven policies. With regard to ways the FCC can look outside the beltway to engage on these issues, I believe constant engagement with Tribes is necessary (and is also required by law) and I believe that there are opportunities for the FCC to ensure that the various Federal agencies involved with making broadband available on Tribal Lands are acting in a streamlined and coordinated manner.

Question 3: President Trump is trying to use existing emergency authorities in an unprecedented way when he cannot get Congress or our allies and trading partners to do what he wants them to do. He has also been very clear that he sees the media as "the enemy of the people" and levies daily attacks on a variety of FCC-regulated media organizations and other media owners, threatening them with retaliation.

Existing law gives the president the ability to declare an emergency and close down parts of the Internet and take over broadcast networks to transmit messages. We expect that this would only occur in the direst circumstances such as war or extreme natural disasters. But there is no guarantee that is the case with this—or any other President.

Would the commission work with Congress and provide technical assistance to better reform our emergency laws regarding communications technology to ensure that emergency authority is not abused by any President for political or personal purposes?

I can't speak for the willingness of the Commission to work with Congress to provide technical assistance to reform our emergency laws in this manner, but I would certainly work with Congress to provide technical assistance on efforts to reform our emergency laws or on any other topic for which my assistance is requested.

Question 4: Millions of Americans rely on their local public radio station for news, educational and cultural programming, emergency alerts and public safety information – including in rural, remote and tribal areas. Many public radio stations are the only local news organizations in their communities, and provide unique programming and information tailored to their communities' needs and tastes. The public radio satellite system relies on C-Band spectrum to distribute national and regional programming to and among the local stations. In parts of New Mexico and other rural and tribal areas, there are few alternative sources of news, public safety information, and regional programming -- and no workable alternatives to satellite as a means to distribute public radio programming.

As the FCC considers plans to transition C-Band spectrum for 5G and commercial wireless services, please detail how the agency will ensure the C-Band spectrum and satellite service necessary for local public radio stations to continue to provide vital news, programming, and public safety services to America's rural and tribal communities.

Public radio is one of our most valuable news sources, and the Public Radio Satellite System provides critical distribution services for more than 1,200 public radio stations. While I want to make available as much mid-band spectrum as possible for wireless use, I will work with my colleagues to ensure that any plan for doing so in the C-Band protects incumbent users like public broadcasters.

Senator Jon Tester

Written Questions Submitted by Hon. Jon Tester to the Federal Communications Commission

Question 1. The FCC's Captioned Telephone Services gives folks independence to connect with the world. I support the FCC's intention to ensure this program can handle the influx in participates, however I am concerned about using an automatic speech recognition to replace humans. What is the Commission doing to ensure this technology is adequate and the quality of this service does not decrease?

The Chairman of the FCC directs the work of the Commission's Bureaus and Offices and is in the best position to offer insight into the ongoing review of requests for certification from certain IP-CTS providers. The Chairman is also best positioned to speak to efforts to ensure that automatic speech recognition (ASR) is adequate and does not represent a decrease in quality from services that utilize human Communication Assistants (CAs). That being said, I fully believe that the Commission must have a full and complete understanding of the quality and performance of ASR providers prior to granting certification. We need to ensure that technology closes gaps and levels the playing field, and does not leave folks behind. As technology improves, ASR has promise to offer high-quality, cost-effective, and easy to use alternatives to services using CAs. But we need to ensure that these services work for everybody before deploying them widely.

Question 2. I am also concerned that reforms to this program would require candidates to travel to their State equipment distributor to receive certification instead of from their physician. As you move forward, will you take into consideration what impact this will have on folks in rural America?

The administration of Commission programs designed to bring communications services to unserved or underserved communities is among our most mission-critical and important responsibilities. The TRS Fund, and related programs serving persons who are deaf, hard of hearing, deaf-blind, or have speech disabilities, are certainly in this category. While I believe that the integrity of these programs must be preserved, I don't support setting up needless barriers to participation for otherwise eligible users. While I am aware of the proposals mentioned here, I do not have insight into any direction of Commission staff. I would look very carefully at any final rules that would negatively impact the ability of any eligible user, including rural users, to take advantage of these programs and services.

Written Questions Submitted by Hon. Jon Tester to the Federal Communications Commission

Question 1. According to your Report on Broadband Deployment in Indian Country, less than half of homes on rural reservations have access to that same level of broadband service. What are your recommendations for Congress on how to help?

The Tribal Broadband Report that the Commission issued in May of this year noted, as you point out, that Tribal areas of the U.S. are way behind other areas of the U.S. in terms of broadband availability and that rural Tribal areas are even farther behind. And, this report was created using the Commission's frequently-criticized broadband data, data that has been shown to overstate coverage.

I support measures to help Tribes and Tribal areas with broadband and other connectivity needs. I think that Tribal bidding credits in auctions and creative ideas for allowing tribal use of spectrum will be part of the solution to Tribal connectivity issues. But, the Commission needs to do better, both in understanding shortcomings in broadband availability on Tribal lands and in taking steps to make improvements.

Question 2. Consultations plays such an important role, is the FCC's office of Native Affairs and Policy adequately staffed?

The Chairman of the FCC is responsible for determinations regarding the staffing levels of Commission's Bureaus and Offices and is in the best position to offer insight as to whether the Office of Native American Policy is adequately staffed to meet requirements that the Commission consult with Tribal Governments.

Question 3. Do you have any updates on the progress of the Native Nations Communications Task Force?

The Chairman of the FCC directs the work of the Commission's Bureaus and Offices and is in the best position to offer insight into progress of the Native Nations Communications Task force.

Written Questions Submitted by Hon. Jon Tester to the Federal Communications Commission

Question 1. Do you believe we need to remove existing Huawei equipment from our telecommunications infrastructure?

Yes. I believe that this equipment poses a threat to national security and that we need to find the equipment, fix the problems it presents, and, working with Congress, find ways to provide funding to affected carriers to help them replace the equipment. To that end, I have proposed that we "Find it; Fix it; Fund it." In June of this year, I held a "Find it – Fix it – Fund it" Workshop at the FCC to look into these legacy threats which are currently in our networks. This workshop was the largest and most comprehensive gathering to date to consider these issues and gave me an opportunity hear directly from stakeholders and experts. The workshop's "find" panel focused on the scope of the problem – the amounts and types of equipment that pose threats.

The “fix” panel looked at proposed solutions, including mitigation and “rip and replace.” And the “fund” panel considered mechanisms of funding a proposed solution. I came away understanding that we need a clear and definitive approach to solving these problems.

I’m hopeful that Congress will appropriate funding to help carriers replace insecure equipment already in their networks. Legislation like the bipartisan 5G Leadership Act, which would allocate $700 million from spectrum auctions to fund removal of insecure equipment from communications networks, is a necessary step toward removing the insecure equipment already in our networks. This is a national problem that requires a national solution.

Senator Jacky Rosen
June 12, 2019
Senate Commerce Committee, "FCC Oversight Hearing"

1. **TELEHEALTH-** Commissioner Starks, I understand you recently visited a health clinic in my home state of Nevada, the Amargosa Valley Medical Center in Nye County. Amargosa Valley has a population of about 1,500 and is in one of the most geographically remote parts of the state, so my constituents living in this rural town depend on the local clinic for most of their medical needs. Telehealth is a major aspect of this service. However, I know that during your visit you took part in a telehealth demonstration, and the internet connection deteriorated significantly at times over the course of that demonstration, and when the video connection was in use, the rest of the clinic's internet services became unavailable. In your recent testimony before the House Energy & Commerce Committee, you said in reference to your visit, "we must do better", and I completely agree. The uneven deployment of broadband services in this country can be a matter of life and death when it comes to telehealth, and we need to do better.

   One place we can begin is ensuring that broadband speeds are adequate to support telemedicine. Nevada's state broadband office has expressed their concern with the lack of alignment of broadband speeds across federal agencies. While the FCC uses a benchmark speed of 25/3, other agencies, including USDA, use a lower 10/1 benchmark that can make it seem as if communities are *technically* being served by broadband service, even when they do not actually have access to high-speed internet sufficient for services like telemedicine.

   a. Commissioner Starks, what is the minimum speed needed to provide adequate telehealth service, including video conferencing and the sharing of large data files?

When I saw health care providers in rural Nevada using telehealth, they were, as you mention in your question, using a connection that deteriorated over the course of the demonstration, and use of it slowed down or stopped other internet services in the clinic. To me, this connection is not "adequate" - it barely allowed for a video connection and I don't think it would have allowed the clinic to share large data files in a timely manner.

Applications like video conferencing and sharing large data files require dedicated, high-capacity, symmetrical connections. While various technologies can support such connections, I believe that a fiber connection, with its nearly limitless bandwidth and upgradability, combined with low latency and potential to provide symmetrical service, is best suited for telehealth applications.

b. To your knowledge, do most rural clinics have access to the speeds needed to connect patients with doctors in order to provide services that would otherwise be unavailable without a two or three hour car trip?

As you mentioned in your question, some of the clinics I visited in Nevada have only enough bandwidth to carry a video conference, and when a video conference is ongoing, other uses of broadband in the clinic either slow or stop. Unfortunately, I don't think the demonstration I saw in Nevada was unique or unusual. I heard a similar story during my recent visit to the San Felipe Pueblo in New Mexico. On a national scale, the FCC's most recent broadband deployment report shows that 26.4% of people in rural areas of the U.S do not have access to a broadband connection capable of a 25 Mbps download, 3Mbps download speed. I expect that the percentage of rural clinics without sufficient broadband access is even higher because clinics need higher download and, especially, upload speeds in order to provide the types of health services that would enable patients to receive care locally without requiring them to drive to a distant urban hospital.

c. Should we be investing more in fiber deployment to our rural communities? And how quickly can this be rolled out?

Yes. Investments in fiber are investments in the future of connectivity. Fiber provides extremely fast service and has virtually limitless capacity—which would future-proof broadband investments, ensuring that they aren't obsolete in the next decade. Using fiber will also ensure that broadband infrastructure is able to support multiple current or future bandwidth intensive applications without causing connections to slow down. Additionally, fiber can be upgraded without the need to dig it up or remove it from wherever it is installed.

Several Federal government initiatives, including the FCC's Universal Service Program and USDA's ReConnect program are already working to provide support for broadband deployment. But, a significant Federal investment in broadband infrastructure will be needed to truly ensure

that rural areas are connected with high-capacity, future-proof fiber, and this investment can't come quickly enough.

Questions for the Record- Senator Amy Klobuchar
June 12, 2019-FCC Oversight hearing

Question for Commissioner Starks, Federal Communications Commission

The FCC's elimination of net neutrality rules—which went into effect last year—threatens the way we communicate with each other, how companies do business, how consumers buy goods, and even how our kids learn. I cosponsored the Save the Internet Act—which passed the House in April—to restore these rules to ensure a free and open Internet.

- Can you explain how the repeal of net neutrality has impacted connectivity in rural America?

Internet openness is one of the most critical communications issues facing policy-makers and consumers today and I believe that consumers need strong legal protections to ensure they have the access to the internet they expect, and that providers need clear and binding rules of the road. The FCC is the only agency with comprehensive expertise on these communications issues. It needs to be empowered to make rules and take actions to ensure internet openness.

I'm in favor of returning to the FCC's 2015 Open Internet framework to put the FCC and consumers back in the driver's seat. I think that the FCC's 2015 order established the rules singling out the types of harmful practices that we want to avoid while providing sufficient forward-looking flexibility to both the Commission and providers. I am concerned that the current framework may undermine consumer protections and may threaten the internet openness on which our economy and our democracy, and Americans, both rural and urban, have come to rely.

Slowed or throttled internet traffic and applications can be particularity harmful to rural America, which is already faced broadband connectivity challenges. The FCC reports that over 26% of rural Americans do not have access to high quality fixed broadband. Provider blocking or throttling of applications and internet traffic would stand to make a bad situation worse, making service less reliable and available in rural areas, and deepening the growing state of internet inequality that is leaving many parts of rural America behind.

Subcommittee on Communications and Technology and
Hearing on
"Accountability and Oversight of the Federal Communications Commission"
December 5, 2019

The Honorable Geoffrey Starks, Commissioner, Federal Communications Commission

The Honorable Anna G. Eshoo (D-CA)

1. The decision to increase minimum service standards was proposed in conjunction with a port freeze. Coupling these items was essential for increasing service, while also reducing waste, fraud, and abuse. Why is the FCC moving forward with just increasing minimum service standards which has caused carriers to cease providing Lifeline services?

Response:
The Lifeline program is the only federal subsidy that exists that provides our most low-income Americans a way to get connected to vital communications services. During a number of visits to homeless shelters in cities, including San Francisco, Los Angeles and Washington D.C., I have seen first-hand that without the Lifeline program, we have a number of Americans who are unable to get in contact with potential employers, locate social services, make medical appointments or remain connected to family and friends. This program needs to be protected at all costs, and one of the reasons why I voted against the Commission's decision to alter the minimum service standards was because the majority failed to conduct a robust study about the Lifeline marketplace before making changes to the minimum service standards. As a result, there is increased uncertainty for both service providers and Lifeline customers. Although we do not yet know the impact of the change of the changes in the Lifeline minimum service standards, it is safe to say that in an era of increased income inequality, this Commission is not doing everything in our authority to connect our most vulnerable Americans. We have a duty to ensure all Americans are connected to both voice and broadband services and it is time for the Commission to do more for our most marginalized consumers.

2. The FCC found that "the large increase in the minimum standard for mobile broadband usage could unduly disrupt service to existing Lifeline subscribers." Would the FCC suspend the implementation of next year's minimum service standard if a similarly large increase is anticipated again?

Response:
The decision to suspend the implementation of next year's minimum service standards lies with the Chairman, but in my prior dissenting statement regarding Lifeline, I stated my support for pausing the Lifeline minimum service standards prior to the December 2019 changes. Until the Commission has completed its report on the Lifeline marketplace and until that report has been thoroughly analyzed, we should refrain from making any additional changes without the necessary data to make informed decisions. There was overwhelming support in the prior record

that stated that a pause in minimum service standards was necessary and I have serious concerns about what service standards will be implemented in 2020, and more importantly how those standards will subsequently impact Lifeline consumers.

3. Is the FCC considering opening a new proceeding to revisit the appropriate formula for calculating minimum service standards for Lifeline mobile broadband service?

Response:
A decision to open a new proceeding to revisit the appropriate formula for calculating minimum service standards is under the direction of the Chairman's office. I've previously stated that good policy decisions related to Lifeline or even the funding of broadband infrastructure cannot be made without reliable and accurate data. The Commission cannot afford to make decisions that put our most vulnerable Americans at risk for losing communications services that impact every aspect of their lives.

4. Thank you for convening experts and releasing a report on the cybersecurity of our wireless networks, especially with respect to threats from compromised suppliers, such as Huawei and ZTE. It's critically important that the FCC and our Subcommittee have taken action on this matter.

   Beyond supply chain issues, what else do you recommend we focus on as it relates to securing our nation's wireless networks—for example, SIM swaps, carriers' usage of dated encryption and authentication algorithms, and the threats of cell simulators or IMSI catchers?

Response:
When it comes to wireless networks, our adversaries are determined and creative. I agree wholeheartedly in the security threats you have listed, and they demand our immediate attention. And those threats will only become more critical as 5G networks and devices create a flood of new data. I am optimistic that the 5G standard will include new security solutions—from virtualization to the expanded use of encryption. But those tools have to be actually deployed to be effective, and as a country we should be working toward upgrading our older, more vulnerable networks to the latest standards as quickly as possible.

In addition to the issues you identified, I believe that election security must be a focus of our efforts. We know that many states are still using voting equipment that connects to the same cellular networks we use for our mobile phones. Once a device is connected to a wireless network, it's subject to the same security threats as other wireless networks. Because of these risks, I have reached out to the major wireless carriers to discuss how they're protecting the security of their networks and working with election officials.

5. Some are proposing allocating spectrum in the 6 GHz band for licensed use, by relocating incumbents to the 7 GHz band, though that band is currently occupied by

government entities, including the Department of Defense. How long has the FCC been working with the federal government on allocation of 7 GHz?

Response:
As you note, as part of their proposal to allocate a portion of the band for licensed use, certain parties in the 6 GHz proceeding have proposed relocating incumbents in the upper portion of the 6 GHz band to the 7 GHz (7.125-8.4 GHz) band. The FCC has historically worked closely with the federal government on the allocation of all spectrum bands, including 7 GHz. In fact, more than 10 years ago, the Commission worked with federal users to relocate their microwave backhaul operations in the 1710 MHz to 1755 MHz band to the 7 GHz band. Currently, while the Chairman handles inter-agency coordination on policy matters, I am personally unaware of any discussions with NTIA or federal users on revising the allocation of the 7 GHz band.

6. As you have recognized, the need for unlicensed spectrum is as high as ever, and it's growing. Some have raised concerns about harmful interference to microwave services if unlicensed devices would be allowed to operate in the 6 GHz band. Do you have the data necessary to create rules for these two services to coexist?

Response:
While I strongly support the goal of making available as much unlicensed spectrum as possible, I also strongly believe that any plan to do so must protect incumbent microwave services from harmful interference. I am optimistic that power and geographic limitations, coupled with a robust Automated Frequency Control (AFC) system, will accomplish the latter goal. I look forward to reviewing the expert analysis of the Commission's engineering staff and will review their recommendations.

7. One promising innovation in wildfire mitigation is the Falling Line Conductor that uses low-latency, private LTE networks to depower a broken line before it hits the ground and becomes a fire hazard. Do you have a view on how such technologies can help mitigate wildfire threats and the need for preemptive electrical shutoffs? When will the FCC complete its 900 MHz proceeding that impacts the ability of utilities to use such technologies?

Response:
The Chairman is in the best position to address your question about timing on the 900 MHz proceeding. The recent wildfires in California have focused policymakers across government on the need to use our communications networks to protect against and respond to natural disasters. The Falling Line Conductor capability is particularly promising, as it would allow utilities to use 900 MHz private LTE broadband to remove power from a broken line before it can hit the ground and cause a fire. This technology could also be helpful during a hurricane response, as construction and recovery crews often face costly delays due to live power lines blocking roads.

8. On June 11, 2019 at a USTelecom Forum on robocalls, Chairman Pai said "Now that the FCC has given you the legal clarity to block unwanted robocalls more

aggressively, it's time for voice service providers to implement call blocking by default as soon as possible." I couldn't agree more. Have carriers responded to this call to action? Have companies raised legal, technical or other objections with these actions requested?

Response:
Multiple voice service providers and trade associations have responded by filing comments and meeting with the FCC to discuss their efforts to implement call-blocking services. I strongly agree that this is a consumer protection issue that must be a focus of our efforts. The industry collectively has expressed strong support, and many individual companies have confirmed their implementation of call authentication using the SHAKEN/STIR framework as well as participation in industry-led call trace back efforts to identify and stop those engaging in illegal robocalling. At the same time, other industry representatives have raised concerns about the need for standards and protocols for certain enterprise calling scenarios to ensure that such calls are not mislabeled or blocked based only on SHAKEN/STIR information. Still others stress the importance of ensuring that inmate calls are not inadvertently blocked by call blocking programs because, for example, they begin with an automated message as do many illegitimate robocalls.

9. At the same USTelecom event in June, Chairman Pai said that "USTelecom has been particularly helpful in making sure that we can quickly trace scam robocalls to their originating source." How successful has USTelecom's Industry Traceback Group (ITG) been in combatting robocalls?

Response:
Both the FCC's Chairman and Enforcement Bureau Chief have acknowledged the USTelecom-led Industry Traceback Group's (ITG) valuable contributions to efforts to trace illegal robocalls and spoofed calls, and the Federal Trade Commission has acknowledged the assistance of USTelecom in reaching a proposed settlement with a prolific violator of rules intended to protect consumers from illegal robocalls and deceptive practices like caller ID spoofing. State Attorneys General have also taken notice of the group's effectiveness; as a result, they have teamed up with and secured a commitment from voice service providers to respond promptly to traceback requests from both law enforcement and the ITG. Although I cannot quantify empirically the scope of the ITG's success in combatting robocalls, their partnerships with federal agencies and state and federal law enforcement suggest they have been both effective and successful in helping to identify the sources of such calls.

10. A *Wall Street Journal* article titled "Small Companies Play Big Role in Robocall Scourge, but Remedies Are Elusive" states that "The FCC has asserted limited jurisdiction over VoIP providers, an agency spokesman said." What prevents or limits the FCC from using existing statutory authority to take enforcement actions against VoIP providers?

Response:

The FCC to date has not classified VoIP service as either a telecommunications service or an information service. Because the FCC's authority over call blocking and call authentication was traditionally based on its Title II jurisdiction over telecommunications carriers, the FCC initially declined to assert that authority over providers of non-interconnected VoIP service. The FCC later determined that it could regulate call blocking by VoIP service providers regardless of their classification, either under Title II as common carriers or by exercising ancillary authority under Title I. Moreover, the FCC in its most recent *Call Blocking Third Further Notice* has asserted broader jurisdiction to mandate caller authentication for all voice service providers under section 251(e), which grants the Commission plenary jurisdiction over the North American Numbering Plan resources in the United States. Thus, I believe any remaining questions about the FCC's authority to take enforcement action against VoIP providers for failure to comply with regulations seeking to prevent unwanted robocalls are largely moot.

11. The FCC's "Report on Robocalls" (CG Docket No. 17-59; February 2019) states that "Five providers that had been identified as uncooperative in traceback have taken steps to participate going forward." Have these five providers continued cooperating with traceback efforts? Do *any* providers remain that are not being cooperative?

Response:
I don't have any substantive knowledge of the performance of the five providers at issue other than what has been reported by the Chairman.

The Honorable Peter Welch (D-VT)

1. A lack of broadband connectivity can impact all aspects of our lives: keeping children on the wrong side of the homework gap from realizing their full potential, posing barriers to telehealth solutions that can improve care, keeping farmers from capitalizing on advancements in precision agriculture, and limiting economic opportunities for workers and small businesses. However, I have been encouraged by the Commission's support of innovative solutions, specifically TV white space, that can enhance the pace, reach and cost-effectiveness of broadband deployment in rural communities. The adoption of a final order in the TV white space (TVWS) reconsideration proceeding earlier this year marked an important first step, and I encourage the Commission to build on this step by issuing a Further Notice of Proposed Rulemaking (FNPRM) to address remaining regulatory hurdles to greater TVWS deployment as soon as possible. By taking this step, the Commission can update its rules surrounding TVWS, which will increase the potential for rural broadband deployment and, subsequently, the availability and adoption of Internet of Things (IoT) applications throughout rural areas.

    a. Will the Commission make the adoption of a TV White Space Further Notice of Proposed Rulemaking a priority to complete as soon as possible and no later than the first quarter in 2020?

Response:

The Chairman controls the Commission's agenda and is in the best position to address your question about timing on next steps for the TV White Space proceeding. I am encouraged by recent progress in discussions between stakeholders, and I hope that the Chairman will circulate a Further Notice of Proposed Rulemaking that reflects those discussions as soon as possible.

The Honorable Tom O'Halleran (D-AZ)

1. Commissioner Starks, as rural communities begin gaining more access to modern broadband technology, I believe it is imperative that communities are empowered to understand how to best use broadband to thrive with e-learning, access telemedicine, and compete in our global economy. I also understand schools, libraries, and community centers in rural areas have begun local digital literacy training programs to teach communities how to leverage modern applications through the internet.

    a. How can the FCC incentivize the creation of more digital literacy training programs for rural communities?

Response:
I believe digital literacy training programs can help those who have been negatively impacted by internet inequality achieve the necessary skills to use the internet as an empowering tool. I believe the FCC should find innovative ways to partner with anchor institutions, direct service providers, and other community-based organizations to highlight and offer digital literacy training programs. For example, I believe libraries can be 21st-century tech hubs because they are a trusted institution in so many communities across this nation. It is the place people visit when they need assistance with computer training, filling out a job application, or a school research project. That is why I believe that libraries and local community organizations can be assisted by grant programs such as what has been introduced in the Digital Equity Act. I publicly applaud Congressional efforts that prioritize digital inclusion in our communities for we know that infrastructure, affordability, and an understanding of how to navigate the internet all go hand in hand.

    b. What role can discount internet offerings from internet service providers to persons already in federal assistance programs (food stamps, housing, etc.) further increase broadband *adoption* in rural communities? Has the FCC examined adoption rates in light of these programs?

Response:
I believe that discount internet offerings from internet service providers can serve as a meaningful way to address internet inequality in both rural and urban communities. I am supportive of these programs and I encourage more carriers to both participate and expand them so all, regardless of geographic location or income-status, can use the internet to empower themselves and their communities.

I am aware that in 2012, the Wireline Competition Bureau conducted a low-income broadband pilot that tested adoption barriers for low-income consumers; however, this program did not include some of today's widely used discount internet offerings such as Comcast's Internet Essentials.

c. How can schools and libraries continue to expand Wi-Fi hotspot lending programs to help close the homework gap?

Response:
When I visited Bossard Memorial Library in Gallipolis, Ohio, I learned that their wi-fi hotspot lending program had a six-week long waiting list. I support the efforts of the librarians and school leaders who have such programs; however, I also know that in the United States, we should not have people on such lengthy waiting lists for a tool that is as crucial as broadband. The members of our community that are dependent on these programs are already overburdened and the Commission should be assisting in the strategic deployment of broadband in our most disconnected communities so they have one less burden to bear. It is the FCC's mission to ensure that every American is connected to high-speed broadband.

2. Commissioner Starks, it is becoming clearer that our election systems nationwide still need federal support to ensure they are secure from vulnerabilities and interference.

    a. What is the FCC doing to exercise risk mitigation practices for voting systems that are still connected to wireless networks?

Response:
The FCC has a statutory obligation to secure our communications networks to protect the national defense. In my mind, the security of our elections—which are increasingly tied to those networks--clearly falls under this obligation. Some states continue to use voting equipment that transmits election information, potentially including results, using the same networks we use for our mobile phones. Once a device is connected to a wireless network, it's subject to the same threats as other wireless communications. Voting results could be blocked or altered by criminals or adversary states using IMSI catchers or by hacking untrustworthy or insecure routers. Despite its expertise on these communications issue, it's not clear to me that the FCC is engaged with this critical issue at all.

The Honorable Robert E. Latta (R-OH)

1. As the author of the Precision Agriculture Connectivity Act that was included in last year's Farm Bill, I am interested in the economic benefit of GPS to the agriculture sector. Talking to farmers in my district, I know GPS can improve farm planning, field mapping, soil sampling, tractor guidance, crop scouting, variable rate applications, and yield mapping. All this innovation relies on connectivity, including

that provided by GPS. How will the Commission continue to protect GPS services from harmful interference?

Response:
The FCC remains committed to eliminating harmful interference with all authorized radio communications, including global positioning system (GPS) operations. In addition to continuing to police the use of GPS "jammers" or similar devices designed to intentionally block, jam, or interfere with GPS service, which violates federal law, the FCC has two open dockets (IB Docket Nos. 11-109 and 12-340) in which it is considering applications to build out a terrestrial broadband network/mobile satellite service in certain spectrum bands near spectrum used for GPS service. Before approving such applications, the FCC must fully consider the concerns raised by GPS operators, the federal government, and others.

The Honorable Adam Kinzinger (R-IL)

1. During the hearing, I asked Chairman Pai the following questions:

   Are there cybersecurity or physical security concerns if information and communications technology companies allow non-cleared or un-vetted personnel access to software development kits or application programing interfaces for 5G networks?

   Is there a common standard to use vetted personnel, AI, or machine learning to analyze source code that will be distributed or used in patches for software updates of 5G equipment?

   While the Chairman provided thoughtful answers in response, I ask that the Commission follow up with the Committee to offer any supplemental information or ideas regarding the ways in which the Commission, using existing authorities, or Congress, by enacting new legislation, can bolster the physical security and cybersecurity of our 5G networks. Please be as detailed as reasonably possible, and if the Commission feels that these responses are best conveyed to the Committee in a confidential manner in order to protect our national security, please indicate as much to the Committee and we will work with you all to make appropriate arrangements.

Response:
I am optimistic that new features in the 5G standard will greatly enhance the security of wireless networks. I remain concerned that the security benefits of 5G—like all of its benefits—will be unevenly distributed. If 5G networks are not deployed in low-income and rural areas, those Americans will remain vulnerable. Congress can support efforts to improve security by redoubling its efforts to combat internet inequality and ensure that 5G reaches all Americans quickly.